A Selected Bibliography of Publications by, and about, Lord Ernest Rutherford of Nelson

Nelson H. F. Beebe  
University of Utah  
Department of Mathematics, 110 LCB  
155 S 1400 E RM 233  
Salt Lake City, UT 84112-0090  
USA  
Tel: +1 801 581 5254  
FAX: +1 801 581 4148  
E-mail: beebe@math.utah.edu, beebe@acm.org, beebe@computer.org (Internet)  
WWW URL: http://www.math.utah.edu/~beebe/  

21 September 2018  
Version 2.61

Title word cross-reference

(100) [Tho84]. 1.0 − µ [Gro89]. $1.50 [Dav37]. 1/2 [Hei71]. 180° [EFKS96]. $23.00 [Dys05]. $25.00 [Dys05]. $4.75 [Ble57]. $50 [Pip01]. 5 × 1 [Yuh92]. $7.00 [Bat72]. + [SSWB80a, Sad81]. 10 [LMC97]. 12 [RR95]. 14 [RR95]. 16O [RR95]. 32 [RRKH94]. 4 [MDJF83, ZB74]. 6 [Mon66]. 0.18 [WVH+99]. 0.25 [TJRS03]. 0.47 [GRS+91]. 0.53 [GRS+91]. 0.75 [TJRS03]. 0.82 [WVH+99]. 1 [KKK+99]. 1−x [KKK+99, PAF+98, Win94]. 1.7 [WVD+96]. 1.8 [LFA+04]. 2 [CSN+00, DMV+96, IFSI94, Ish83, NJS+03, NFM+07, OaHN98, LFA+04, REJ86, Tho84, YKH+84]. 3 [Cat93, HGM+94, IFSI94, KKK+99, OaHN98, RsdS+89, WZS+91]. 4 [WZS+91, YKH+84]. 5 [ESRDV84]. x [KKK+99, PAF+98, Win94]. α [YKH+84]. α [Fea77, FR13g, GM09, GF10, GR12, Hei68, LMC97, OaHN98, Rut05a, Rut05c, Rut05k, Rut05m, Rut05n, Rut06i, Rut06c, RH06a, Rut06h, RH06b, Rut06m, Rut06l, Rut06j, Rut07g, Rut07h, Rut07j, RG08d, RG08b, RG08a, RG08e, Rut08c, Rut08d, Rut08f, RR08e, RG09b, RG09a, RR09b,
RR09a, Rut09f, RR09d, RG10, Rut10f, Rut10g, Rut11i, Rut11j, RN13, RR13a, RR14, Rut19b, Rut19e, Rut19f, Rut19g, Rut19h, RC21a, Rut21e, RC22, Rut23n, Rut23o, Rut24, RC25, RC27, Rut27l, Rut27a, Rut27b, Rut27c, Rut27d, Rut27l, RAL31a, RAL31b, Rut31d, Rut31f, RLB33, RLB33, RK34, Rut66b, Rut66a, Rut10a, Rut12, WR31, vdB07].

≈ 2 [KSKF93]. β
[FR13g, Hei68, Mos12a, MR14, Rut05n, Rut11i, Rut11j, Rut12b, Rut12c, Rut12e, Rut12h, RR13f, Rut14k, RRR14, Rut14i, Rut14h, Rut66b, Rut12c]. c
[IOI\textsuperscript{11}]. csc\textsuperscript{4}(\theta/2) [Ram75]. γ
[Cha12, CK33, MM12, MR14, Rut04f, RB05c, Rut12b, Rut12c, Rut12e, RDCENdCA13, RR13e, Rut14k, RdcENdCA14b, RRR14, RdCENdCA14a, Rut14i, Rut14g, Rut14h, Rut14f, Rut31d, RE31, Rut31c, RB32, Rut33i]. k
[Bar85]. m [IOI\textsuperscript{11}]. n [Wuy91]. \(\sqrt{3} \times \sqrt{3}\) [Yuh92]. Z [MDJF83].

-Al [OaHNM98]. -Compounds [Adl97]. -GaAs [Wuy91]. -graphite
[ESRDV84]. -Particle [Fen77, RG08d, RR09b, Rut23n, Rut23o, RG09a].
-Particles [RG08a, WR31, GM09, Rut07g, Rut19b, RC25, RC27]. -plane
[IOI\textsuperscript{11}]. -Rays
[Cha12, FR13g, Rut10f, RE31, Rut66b, CK33, Rut27l, Rut27h, Rut33i]. -Si
[YKH\textsuperscript{84}]. -Strahlen [Rut06i, Rut31c]. -Teilchen
[RG09b, Rut31c, vdB07].
-Teilchens [Rut07g, Rut08c, Rut08d, RG09a].

/Cu [LFA\textsuperscript{04}]. /Fe [KSKF93]. /Si [NJS\textsuperscript{03}].

0 [Pip01]. 0-300-01465-1 [Bro86]. 0-340-23805-4 [Stu85]. 0-473-05700-X [Ced00, Pip01]. 0-85274-759-4 [Stu85]. 0-85274-761-6 [Stu85].

1-alkyl-3-methylimidazolium [NOH\textsuperscript{10}]. 1-butyl-3-methylimidazolium
[OH\textsuperscript{+}09]. 100-letiju [Kap73a]. 100m [Fla17]. 100th [Kap73a, Sch13]. 105s
[Rut31b]. 17.50 [Stu85]. 184.\ell [Sin81]. 1895-1896 [Rön58]. 1903 [Adl03].
1904 [Rut05c]. 1908 [Ano09a, Jar08, Rut08g, Tho08a, Tho08b]. 1909
[Rut09e, Rut12a, VRWB12]. 1911 [Ano06, Bad67, Bad85b, Str11], 1913
[TGMR74]. 1926 [Rut27c, Rut27j]. 1927 [Rut26f, Rut28a, Rut28g]. 1928
[Rut29j, Rut29k]. 1929 [Rut30a, Rut30h]. 1930
[Ano31a, CDE\textsuperscript{+}31b, Rut31a, Rut31e]. 1930s [Stu79a]. 1931 [Rut31b]. 1933
[CCJ\textsuperscript{+}34, Rut33a]. 1936 [Rut36h, Rut37a, Rut14]. 1937 [M.39]. 1947
1974 [Lov75]. 1990 [Clo18]. 1er [LRdB\textsuperscript{+}23]. 1st [LRdB\textsuperscript{+}23].

20.00 [Bro86]. 20th [Meh73, Bre97]. 22 [Bad67, Bad85b, CCJ\textsuperscript{+}34]. 2nd
[Rut33h].
ausgesendeten [RR13a]. auspices [Ano12a, CCJ+34, VRWB12]. aussieht [Büh98a]. Australia [Jen85]. Authoritative [Kae39]. autobiography [Hal67b]. Autunite [Rut15a]. Avogadro [Lee98, Mur01, Stu00]. avril [LRdB+23]. Award [Ano08b, Ano09a, Ano36a, Ano46a, Wil17]. Awarded [FR13a, Ano08g]. awards [Adl12, Ano18d]. azide [WVCW76].

B [Hay63, Ihd64, Raz63, Rut28b, See65, Tre75b, Tre76a, LMC97, MM12, RR13d, RR13f, RdCENdCA14b, RdCENdCA14a, Rut14g, Rut14f, RW25]. Ba [FY+99, IFSI94, KKK+99]. Back [Ano08b, Ano09a, Ano36a, Ano46a, Wil17]. Back-Scattering [Bau73a]. Background [Cro74c, NP38, NP40, Ree15b]. backscatter [KKGW85, Sim82]. Backscattering [CLZ99, ERM95, EMVK90, MKM+07, JBS12, LHB+09, LGA+06, NOSK08, OaHN98, LFA+04, SHCK96, ATS86, AAPN06, Adl12, Ano18d].


[Ree15a]. Becquerel [Bel82, Mon66, RM00b, Gen95, RM00b, RM00a, RM01].
Becquerel- [RM00b]. Been [Rut37b, Ano08g, Whe18]. Before
[Bad65, Pre05, Bad83, Rut33h]. Began [FW67, Kae48]. beginning [Cot10].
behavior [Bha82]. behaviour [Mak08].
Been [Rut37b, Ano08g, Whe18]. Before [Bad65, Pre05, Bad83, Rut33h].
Began [FW67, Kae48].

behavior [Bha82].

Becquerel- [RM00b]. Been [Rut37b, Ano08g, Whe18]. Before [Bad65, Pre05, Bad83, Rut33h]. Began [FW67, Kae48]. beginning [Cot10].

behavior [Bha82].

Becquerel- [RM00b]. Been [Rut37b, Ano08g, Whe18]. Before [Bad65, Pre05, Bad83, Rut33h]. Began [FW67, Kae48]. beginning [Cot10].

behavior [Bha82].
C [Arö65b, Opp64, Poo52, Rös58, Sch31, dB14, RLB33, RR95, RR13d, RR13f, RdCENdCA14b, Rut14g, Rut21g, RC24c, RWWW30, RWL31a, RWL31b, ZWJ+02]. **cadmium** [Man82]. CAI [GW73]. **Calcutta** [Ano37c]. **Cathedral** [Dys05, Cat04, Cat12]. **Cathode** [Nia98]. **cathodoluminescence** [CYM+03]. Cause [Rut05l, RS02b, RS02f, RS02a, RS02g]. **Cavendish** [Ano66e, FR13i, Osg66, Woo46, Ano32b, Ano17a, Cam79, Cro74d, Cro74e, Dev71, Dow08, Kim02, Nav06, Rut19c]. cavities [DMV+96]. Cd [Con82, Win94, CBZ+12]. CdS [GC00, LDLM91]. CdTe [GC00]. CdTe/CdS [GC00]. Ce [KSKF93]. Ce/Fe [KSKF93]. CeH [KSKF93]. Celebrate [Ano09a]. Celebration [Ano12a, Rut12a, VRWB12]. Celebrations [Ano72, Oli47]. centenaria [Car98]. **centenary** [Ano17c, FK85, Ano72]. **Centennial** [Fre12, Tre75b, Wyb72, Adl03, Car98, Cat12]. **central** [Bri31, HBA77]. Centre [Ano18a, Meh73, Ano17b]. Centres [Eve06, Har07]. **Century** [BS79, Tho65, Ano33d, Hei79a, Meh73, Rig79, Rut33j, Sie11, Bre97, Sin81, Stu79b, Whe80]. CEO [Ano18a]. **CERN** [Kra14a]. Certain [OKR35b, Rut10f]. cette [RC12a]. Chadwick [Poo52, Sch31, Ano64, Aro66, Bro97, Gan17, Osg66, Seg62, Seg64, Seg66, Coc63]. chain [And73]. Chair [Ano07]. challenges [Lon16b]. Chamberlin [Bru79]. Change [Oli84, RS03b, IYT+09]. changed [Moo66]. changer [Ree15a]. Changes [Rut041, Rut05p, Rut04i]. channeled [SSWB80b]. Channeling [Dav71a, MD69, Bha82, Con82, HKH96, LDLM91, LxW99, LCL+04, MB90, PAF+98, Phü83, RSdS+89, Sar79, SN05, SWZ+05, TMJ+99, TJR503, WCGC86, Whi82, WVD+96, WVH+99, WYV+99, WCZ+02, ZCS+12]. channeling-Rutherford [PAF+98]. Chapter [RSWE27, How58]. Character [Ell60]. characteristics [KG91]. Characterization [DJA+04, FTT96, LHNG14, BVI88, Gro89, Her84, KSKF93, Kot91, LDLM91, Rei79, Vas90]. characterized [SBEO86]. Charcoal [Rut06a]. Charge
Direct [Cat93]. Direction
[BR16, Coc63, Aro66, Osg66, Rut01e, Rut15d, Seg62, Seg64, Seg66].
Discharge [Coo13, Rut08, Rut01f, Rut01a, Rut08e]. Discharges
[Rut94, Rut5]. Discovered [Ano19]. Discoverer [MM03, RCRC04].
Discoveries [Kra76, Pae15a, Seg60, Seg68]. Discovering [Ano99, Tem89].
Discoveries [Kra76, Pae15a, Seg60, Seg68]. Discovering [Ano99, Tem89].
Discoveries [Kra76, Pae15a, Seg60, Seg68]. Discovering [Ano99, Tem89].
Discoveries [Kra76, Pae15a, Seg60, Seg68]. Discovering [Ano99, Tem89].
Discoveries [Kra76, Pae15a, Seg60, Seg68]. Discovering [Ano99, Tem89].
Discoveries [Kra76, Pae15a, Seg60, Seg68]. Discovering [Ano99, Tem89].
Electricity

Electrification [Rut97a, Rut98]. électrique [RG08c]. electroless [Man82, PNFO88]. Electromagnetic [Rut35f, Rut35g, Rut35h]. Electron [Cha64, Coo13, FGM00, Fow83, Rut19d, Rut21h, WMT01, BKP+06, Bra98, BPSW91, Bur86, CGL94, CSN00, GR89, Gro89, HBA77, Ish83, Kot91, LHNG14, Lu87, MB90, O'H75, Phi83, PMCF06, Rei79, SSBW80b, SSBW80a, Sad81, SBE086, Sin93, Stu83, WV07, Wil83b, Wuy91, Yuh92, vdK89].


Element [Rut22g, Sto97, Ber07]. elemental [IYT09, LGF+99, PBFt83]. Elementary [Boa07, Cam97, KH23, Sod04, Wic65, Rut34g]. Elemente [Rut03b, RG09b, Rut24a, Rut24b]. Elektronen [Rut10a, Rut10b]. Element [Rut22g, Sto97, Ber07].

Ellipsometric [BVI88]. ellipsometry [BKP+06, CSN+00, SPL+08, TGDS99]. Ellis [Poo52, Sch31]. Ellyard [Sei86]. Elsevier [Bat72]. Emanation [Rut03a, RB03a, RB03b, Rut04g, Rut04h, Rut04o, Rut08i, RR08b, Rut09a, RT09, RB32, RS02j, RS02i, RS02b, Rut04e, RB04b, RB04c, RR08d, RR08a, Rut08h, RR08c, Rut09j, RR12, RR13c, RR07, RR08a].

Emanationen [Rut01b]. Emanations [Rut01c, Rut06a, Rut01b, RS02d, RS02e, RS03a, RG11]. emergence [Pol60]. Emerging [Gus12, Hon03]. émisés [RH06a, RG08c]. emissions [RR07].

Emitted [Mos12a, RHL31b, GF10, Rut00g, Rut00b, Rut00e, Rut07g, RG08c, RG09b, RR13a]. emittierte [Rut00c]. end [Kru75, Man77]. Enduring [Lon16a]. energetic [vBD89]. Energia [MSB+37]. Energie [RM00b, RM00b, Mon66, Rut07h]. Energies [Elf14, BP93]. Energy [Ang00, Ano22, Ano23b, Ano32a, Ano32b, DYF67, EMVK90, Hes00, Jen11, OKN35b, RM00b, RM00a, RM01, Rut12e, Rut24i, RC29, Rut35k, Seg85, Sod49, Bar85, BVI88, DJA+04, HK96, MB90, RR95, Rut07h, Rut07j, Rut36c, Rut36d, Rut36e, SWZ+05, Sku89, TCZY97, WM88, Yuh92, vdK89, Ano32c, RM00b, Mon66, Tr75a]. England [Stu79b, An07, An18b, She17].

English [Hei74]. enhanced [Sin93]. Enrichment [MKM+07, DG07, Shi88]. Enrico [GLR06]. entertaining [Hil17]. entstehenden [HS39].
Entwicklung [Har38]. Environment [Mer96].
epilayers [LDLM91]. Episodes [Eva96, Fea77, Fea79]. epitaxial [Phi83].
epitaxy [CFMO12]. Era [Cro74b, Lon16c, Lon16d]. erbium [TJR03].
Erdenalkalimetalle [HS39]. eredményei [RA45]. erhielt [CSW97].
Erinnerungen [Rut32b]. Ernest [Ano12a, Ano19, Ano23b, Ano66b, Bad04b, Boh26, Büh98a, Cha65, Cra71, FR13i, Gar62, Hah62, Har38, Hub13, Lüd13, Mil13, Mur13, RSWE27, Rut26a, Sch31, Seg80c, dR92, dCA68, Ano36b, Ano66d, Ano66c, Ano71a, Ano09b, Ano09c, Ano18c, Anoxxa, Anoxxb, Bad71, Bad75, Bad04a, Bad08, Badxx, Ble99, Bro62, Büh98a, Cam97, Cam98, Coh88, Coh91, Coh92, Coh97, Dea03, Far63a, FR13c, FR13d, Fla17, Flo70, Gra02, Gri09, Hah67a, Hei03, Hill17, KS76, Lab38, Lai37, Lee98, Low79, Liid13, Mac11, Mar38, MM03, McK62, Moo74, O'S71, O'S72, Ole81, Opp64, Poo52, Pri08, Ree08, Ril70, Row55, Row57, Siel11, SN67, Stu00, Stu01, del79, Ano60, Bir57, Ble57, Tre76a].
Ernests [Oli66a, Oli66b, Oli85b]. Errata [Ano94]. Erratum [Hwa83].
errege [Rut02e, RA02a]. erreget [Rut02d]. ErSi [WVD+96]. Erzeugung [BR11a, BR11c, RM00b]. Essay [Ano64]. Essays [Boh63, Boh87].
establishing [Clo18]. Estestvennoe [Rez25]. etched [O'C17, Oeh86].
European [Pye78]. europium [RSdS+89]. evaluate [SSWB80b]. evaluated [Ano71b].
Evaluation [Cle81, IOI+11, KIS+89]. evaporated [LGR+99, SBE086]. Eve [Rut05j, dR92, Coh88, Coh89, Coh91, Coh92, Fos49, Lin40, Rut05j, Swa40, Coh40]. Even [Mil95]. Everyone [Hil17].
Evidence [TGMR74, DJBW83]. Evolution [Fow72, Rut91, Rut15m, Rut15n, ZWJ+02]. exactly [EFKS96]. Exchange [MBS+04, HFD+99, HW92, STB+01]. Exchange-diffusion [MBS+04].
Excited [Rut01d, RA02b, Rut02c, Rut02e, RR14, Rut14h, RA02a, Rut02a, Rut03h].
Exhibition [Rut15a, Whe18, Ano17c]. Exiles [Rut34k, Rut34n]. exist [Rut10a, Rut10b]. Existence [Cha32a, Cha32b, HS89, Rut02f, HS39].
Existenz [Mos13b]. Existieren [Rut10a, Rut10b]. expansion [Rez25].
expelled [RH06a, Rut06m]. Experiment [Ano23a, Eic72, Gre07, Hes00, Kap74, Rut29i, VV09, Bis90, DBE+85, DY68, GW73, Hau82, LSN+09, Lor88].
Experimental [Hon03, Ano37d, Bur13b, Sod02]. Experimentalists [Gea14a]. Experimentalvorlesungen [Sod02]. Experimentelle [Mos13b].
Experiments [Ano08a, Ano19, BELG68, Gea14a, Gea14b, OR33, Rut15b, RC24b, Flo70, Pae15a, RSDS+89, Sha87a, Tre74a, Rut02e, Rut08h]. Expert [Ano08a]. Explain [Ano32b]. exploded [Ano33d]. Exploding [Rut15i, Rut16b, Rut15g, Rut15h]. Explore [vG95]. Exploring [Rit92, WH72]. Explosion [Bad04a, Hei03]. Exponential [FR13e]. exposed [Rut97c, Rut97a, TR96]. Expulsion [Ano08a]. extended [WM88].
Extension [Ano12b]. extraordinary [Jen08].

F [Whe04]. F. [Ble02, Bro62, Rus56a]. F.R.S [Ano36a, Ano46a, Ano66b, How58, dCA37, Boh37, Bra37, Cha37, Eve37, Smi37, Sod37, Tho37a, Tho37b].
Kae48, Wei70, Whe18. Greater [Pye78]. Greatest
[Ano32c, Foc37, Focxx, Sat18, Ano37d]. green [Wil15]. grosser
[Rut31d, Rut31c]. Groups [Dys05, Far01, Rut12e, Cat04]. Groups
[RWWW30]. grown [KIS+89, ZCS+12]. Growth [OaHNM98, Zim69a,
Zim69b, DGC07, FGM+00, HV84, HGM+94, KSKF93, SDD+08, YKH+84].
growth-mode [KSKF93]. GsSb [Sar79]. Guest [Ano09a]. Guthrie
[Rut26f]. Guy [Sei86, Sen87, Stu85]. Hawking
[Ano18e, Cro01, Sat18, Wal18]. Haven
[Bro86, Hei71, Szy85]. Heat
[Rut05l, RR12]. Heating
[RB03a, RB03b, RB04a, Rut04e, RB04b, RB04c, Rut94, Rut27g, Rut28c, Rut29a, Rut23m, Tod14,}

H [Ano64, Pia24, Sno67, Sno68, YKH+84, YKH+84]. H. [Hei74, Rut16a]. Haas
[CSW97, CSW97]. hafnium [IYT+09]. Hahn
[CSW97, CSW97, Hah67b, She83a, She83b, Tre83]. Hails
[NL00, Ano09a]. hall
[Ano37b, KIS+89, ZCS+12]. Hall
[OaHNM98, Zim69a, Zim69b, DGC07, FGM+00, HV84, HGM+94, KSKF93, SDD+08, YKH+84].
growth-mode [KSKF93]. GsSb [Sar79]. Guest [Ano09a]. Guthrie
[Rut26f]. Guy [Sei86, Sen87, Stu85]. Hawking
[Ano18e, Cro01, Sat18, Wal18]. Haven
[Bro86, Hei71, Szy85]. Heat
[Rut05l, RR12]. Heating
[RB03a, RB03b, RB04a, Rut04e, RB04b, RB04c, Rut94, Rut27g, Rut28c, Rut29a, Bha82,
CFMO12, DGC07, HNS+11, KB93, NJS+03, NFM+07, NOH+10, NMSK13, OHN+09, RR95, Rut24e, Rut24f, Rut24g, Rut24h, TCH97, Ano371, Lau37]. High-Energy
[EMVK90, RR95]. High-Frequency
[NOSK08, HGM+94, IYT+09, CFMO12, DGC07, HNS+11, NJS+03, NFM+07, NOH+10, NMSK13, OHN+09]. Hi.
high-temperature [FLP+89].
Hilger
[Stu85]. Him
[Ano09a, Ano38b, RCO+54]. Hiroshima
[Pre05]. Histoire
[Mon06]. historia [dAMxx]. Historic
[Ano18b, Coh97, She17, Wal18]. Historical
[Seg85, Rön58]. Histories
[Pei97b]. historiografía [dAMxx]. historiography [dAMxx]. History
[Adl97, Anoxxb, Anoxxc, Eva96, Gar81, Her72, HHK87, O’C17, RN04, Rut19c, Rut23m, Rut24j, Rut33b, Sin81, Stu78, Stu79b, WP85, Ber07, FH60, GA71, Har05, Kim02, KHFA67, Leo05, dAMxx, Rut12a, Rut23m, Tod14,}
Tre77b, WH72, NP38, NP40. Hitting [Kow53]. Hodder [Stu85]. Home [Ano09c]. Hon [dCA37, Boh37, Bra37, Cha37, Coh40, Eve37, Eve39, Eve13, Smi37, Soda37, Swa40, Tho37a, Tho37b, dB32]. Honorary [Lüd13]. Honors [Ano10], honour [Ano37k]. honoured [Ano09b]. Honours [Ano66d, O’S71, O’S72]. Honorary [Lüd13]. Honors [Ano10]. honour [Ano37k]. honoured [Ano09b]. Honours [Ano66d, O’S71, O’S72]. horse [Dow08]. Horvath [Gri09]. Hotel [Wel90]. Houston [Wel90]. Human [Boh63, Dys05, SMJ35a, SMJ35b, Boh87]. hundred [AK15, Ano95, DMPA08, Mor74]. Hungarian [RA45]. Hunting [FR18]. hydrated [Wan96]. Hydrogen [ERM95, OKR33, OHR34a, OHR34b, Rut19f, Rut21e, Rut29i, RK34, RSA+34b, RSA+34a, Rut37d, Til96, BVI88, Eid48, HKH96, Lak96, Rut33c, Rut34j, Rut34a, Rut34b, Rut34c, Rut34d, Rut34l, Ano32b, Rut19e]. hydrogen- [BVI88]. hypothesis [Stu83]. Ich [Büh98a]. Ideas [Kae36, Bre97, HT10]. Identification [Rut22g]. identity [Tem89], ignorance [She17], ih [Rez28], ihr [CSW97], ihre [Mec14, Rut13b, Rut13g]. II [Aro65a, RS02b, Rut19f, Rut21e, Rut29i, RK34, RSA+34b, RSA+34a, Rut37d, Til96, BVI88, Eid48, HKH96, Lak96, Rut33c, Rut34j, Rut34a, Rut34b, Rut34c, Rut34d, Rut34l, Ano32b, Rut19e]. III [Ano66c, Coh91, RS02k, Rut19g, Rut20d, Rut21c, Rut22l, Rut26d, Rut26k, Rut27c, Rut28f, Rut29d, Rut30d, Rut35h, Aro66]. illustrated [Bri31]. illustrations [RA45], illusztrációkkal [RA45]. in [Sod02], image [LHNG14, Pye78]. images [Tab97], IMFP [Fow83]. imidazolium [NMSK13]. imidazolium-based [NMSK13]. imide [NOSK08, NOH+10]. Immense [Ano23b]. Immersion [KT84]. implantation [BPSW91, PAF+98]. implanted [BKP+06, Bha82, CFMO12, FTT96, GRS+91, KBvB+05, KG91, Rot74, SSBW80a, Sad81, TJRS03, WCGC86, Whi82, ZWJ+02]. Implications [Ang00, Nia98, RN04, NM12]. Importance [Bad71, Ble99]. important [Wil15]. Improvement [HNS+11]. Improvements [BR16]. InAs [Sar79]. inaugurated [Sie11], incidence [Wan96], incident [BP93], incomplete [Pye78]. incorporation [KB93]. India [Ano38b]. Indian [Rut38c]. Induced [Bau73a, GLR06, Bau73b, CBZ+12, RKL88, RA02a]. Industrial [All64]. inelastic [Fow83]. Infecting [RMM+29]. Influence [Kae39, SG85, SLA+00, DMV+96, Rut01b]. infrared [Sin93, TGDS99]. InGaN [PPA+02]. InGaN/GaN [PPA+02]. initial [DGC07, HV84]. injustice [CSW96]. Inner [Ree06]. Innovation [Whe18]. InP [Phi83]. Inscribing [Dea03]. institut [CCJ+34]. Institute [CCJ+34, EMT, EC13, Rut13e, Whe18]. Institution [Rut36b]. Int [Rut05c], integrated [Gro89]. Intense [Rut27g, Rut30i, FLK92, LSK+88, SML91, YHS97]. intensité [Rut06b]. Intensity [Rut06b, Rut06a]. Interaction [CK33, Rut33]. intercalation [ESRDV84]. Interdiffusion [IFSI94, FIY+99]. interdiffusions [SCP+91]. Interest [Bar71]. Interface
Ano38b. Limit [Ano32c, Kra13]. limiting [vBD89]. limits [RR95]. LiNbO
[RSdS+ 89]. Lineage [Ano99]. link [Ano09c]. Linus [Gri09]. Lipson [Ano64]. Liquid
[Rut94, RS03a, RR13f]. LL.D [How58]. Lloyd [Sno67, Sno68]. location
[RSdS+ 89, TJS03]. locking [HZ15]. Logic [GRS87]. London
[Bur64, Hei71, Stu85]. Long
[RW16, RWL31a, RLB33, Rut21g, Rut21d, Rut31c, Rut16d, Rut31d]. Long-range
[RW16, Rut21g, RCL31a, Rut21d, Rut16d]. look [Kru75]. looked [Fei11]. looks
[Büh98a]. Lord
dCA37, Ano37l, Ano38c, Ano64, Ano66e, Ar65a, Ar66, Boh37, Bra37,
Bur64, Bur38, Cha37, Coo37, Coh40, Dav37, Eve37, Eve39, Eve13, Gei38a,
Har38, Osg66, Seg62, Seg64, Seg66, Seg80c, Smi37, Sod37, Swa40, Tho37a,
Tho37b, db32, dCA38, Ano33d, Ano36a, Ano37d, Ano37c, Ano37b, Ano37e,
Ano37h, Ano37l, Ano37f, Ano37g, Ano37k, Ano38a, Ano38b, Ano46a,
Ano46b, Ano50, Ano66a, Ano09a, Bru64, Cha65, Cha14a, Cha14b, Cha14c,
Cra71, Cro35, Dal50, Dav37, EC38, Fea40, Fec73a, Fea73b, Foc37, Foc39,
Gei38a, Geo38, Geu38, HM31, Har38, Jac72, Jar08, Kap66a, Kap66b, Kap73b,
Kay63, Lau76, Man76, MSB+ 37, Mil38, Mol63, Mur13, Rus37, Rus51, RC62,
Sm97b, Som38, Tho08a, Tho08b, Tho70, Tiz46a, Tod14, VPW14]. Lorentz
[Pia24]. Loss [Rut23k, MB90, Rut24l]. Louis [Rut05c]. Love [AH13, FF17]. Low
[Ang00, Bha82, DYF67, HKH96, Rut30i, BVI88, DJA+ 04, DJS97,
Hwa82, Hwa83, KB93, LCL+ 04, MDJF83, Rut24e, Rut24f, Rut24g, Rut24h,
WM88, YHS97, Yuh92]. low- [MDJF83]. Low-Energy
[DYF67, HKH96, BVI88, WM88, Yuh92]. low-pressure
[Hwa82, Hwa83, YHS97]. Low-temperature [Bha82, LCL+ 04]. Lowwood
[Ole81, Ole81]. Luis [Rec16]. luminescence [KG91]. Luminosity [Rut10f].
LV [BR11d]. LVII [GR12, RN13, RR14, Rut14e]. LVIII [RB05c, RG11]. LX
[RS03a, Rut30h]. LXI [GM13]. LXII [JR13, Rut04n]. LXIV [RS02f]. LXV
[Rut09]. LXVII [Rut10j]. LXVIII [Rut08d]. LXXII [Rut07b]. LXXIX
[Rut11i]. LXXV [GF10, Rut02a]. LXXVII [RG10, RR13d]. LXXVIII
[Rut13b]. LXXXIV [RS02c]. LXXXIX [RC21b].

M [Lov76, Mon66, Pia24, Whe04, Gro89]. M. [Coh40]. M.A [How58].
[Dav37]. Madame [Rut34f]. Made [Ano19, Ano32b, Cli87, Clo18, Mer96].
Madison [RFF+ 01]. Magic [Cho01]. Magnetic
[Mur13, Rut96b, Rut97b, Rut06c, Rut27g, Rut30i, RLB33, RLV33, HZ15,
KLa+ 90, LSK+ 88, Rut96a, Rut03b, Rut03f, Rut95, RG02a, Sh02].
magnetische [Rut03b, RG02a]. Magnetization [Rut5, Rut94].
magnetron [Cat93]. magnitudes [Rut09k]. Maine [Lig18]. make [Mil95].
 Makes [Ano08a]. Making [Ano19, CAN88, Dea03, Sla13, Cam14, Ano32c].
Man [Ano32a, Bro73a, Eva39a, Eva39b, Kae39, Oli72b, Rut24i, Bat72, Fei11, Lew02, Moo66, Sch57, Wch18]. Manchester
[Ano64, Bir61, Bur64, Har07, Hay63, Raz63, Seg64, dCA68, Ano07, Ano08b, Ano08f, Ano09a, Ano12b, Ano17d, Bir62, Bir63, Fes62b, Gae61, Gei38b, Hug08, Kat15, Lon16b, Rus51, RC63, Ano64, Ihd64, See65, Aro65a].
Manhattan [Ano32a, Bro73a, Eva39a, Eva39b, Kae39, Oli72b, Rut24i, Bat72, Fei11, Lew02, Moo66, Sch57, Wch18]. Many [Kae36].
Manley [NL00].
Mass [Gam30, RH06a, Rut37d, BPSW91, Cle81, CSN00, Eid48, Gro89, NMSK13, Reu81, Rut06m, Rut07g, RR13a, RR14, Rut21g, Wil83b, vW35, RH06b].
Massachusetts [VRWB12]. Masse [RH06a, Rut07g, RR13a]. Masses [OKR35a]. Material [JBS12]. Materials [Rut03c, FLP89, SBEO86].
Materie [Rut24a, Rut24b]. Mathematical [Rut09i]. Matin [Ano19].
Matrix [LRF86]. Matter [Ano08a, Ano32a, Fre79, Rut06k, RG08e, Rut12f, Rut22f, Rut22p, Rut23i, Rut23q, Rut23a, Rut26h, Rut38d, Rut38e, Tre75b, Whe04, FR33, Rut06m, Rut11a, Rut15m, Rut20d, Rut20c, Rut20d, Rut21a, Rut21b, Rut21c, Rut22e, Rut23s, Rut24a, Rut24b, Rut25b, Rut25i, Rut28d, Rut28e, Rut28f, Rut30g, Rut33e, Rut34e, Rut34f, Rut12, Rut13c, Rut13d].
McGill [Ano09b, Eve06, Ano07, Bad79a, Fea62a, Hah62, Hei79b, Lon16b, Mor84, Sha37, Sod03, Ter38, Tre79a]. McTavish [Wil15]. Mean [Jen11, Fow83]. Means [Mos12b, Rut37b, Yu92, vBD89, vBBGO90].
Measured [HKM09, SER01]. Measurement [Boa07, vBD89, HKH96, YKH84]. Measurements [MG12, Bur86, CYM03, DBvdV87, KKGW85, LSK08, Rut11e, SDD08, vBBGO90, vBB09, vBB92]. Measuring [KB93, Mar61, Rut16e, SBE06].
Mechanical [Bai13, SC13, Tem89]. Mechanism [FW67, YKH84]. Medal [Ano36a, Ano46a, Ano18d]. Medical [DMPA08, Pod10a].
Medientransformation [Lud13]. Meet [Gal18a]. Meeting [Ano38b, CCJ03, Rut27e, Rut27f, Rut28a, Rut28g, Rut29g, Rut29k, Rut30a, Rut30h, Rut31a, Rut31e, Rut38c, LRdB23, Ril70]. meets [Boo99]. Meitner [CSW97, Bih98b, CSW97, Sim96]. memoir [Lov76]. mémoire [Rut12c].
Memorial [All64, dCA58, Ano18d, Bla59, Boh61, Bra61, Bur83, Bur82, Cha54, Coc53, Dar56b, Dec67, Fea77, Fow72, Mar54, McG84, Moo78, Mor75, Mot63, Rut37a, Rut14, Sho82, Tiz46b, Zim69a, Zim69b, SR37, Ter67].
Metallurgy [GRS87, KT84]. Metals [Mot63, Sho82, HS39].
Metamorphosis [Tre75d]. Method [RG08a, RG08e, RC12b, RWWW30, RLB33, FKL92, KIS+89, Rut03h, RG08c, RG09b, RC12a, Rut16e]. Methode
dCENdCA64, Meh73, Ree08, RS02b, RS02f, RS02c, RS02a, RS02g, RG08b, Rut08c, Rut08d, RG09a, RR09b, RC24c, Sod02, Wen53, RR09a.
Naturwissenschaft [FH60].
Naucnye [Rez71, Rez72].
Nb [KKK+, 99].
Neale [Stu79b].
Near [MKM+, 07, Kae36, KBvB+, 05, GHCA91, RR95].
Near-Surface [MKM+, 07, KBvB+, 05, GHCA91].
Needs [Rut19c].
Neglected [EMR07].
Nekrolog [Som38].
Nella [Seg76].
Nelson [dCA37, Ano36a, Ano46a, Ano64, Ano66e, Ano66b, Aro65a, Aro66, Bad04b, Boh37, Bra37, Bur64, Cha37, Coc63, Eva39a, Eva39b, Eve37, Har38, M.39, Osg66, Seg66, Sni37, Sod37, Som38, Tho37a, Tho37b, dB32, Badxx, Bru64, Cha65, Cha14a, Cha14b, Cha14c, Cra71, Dai50, Foc37, Gei38a, Har38, Jar08, Mil38, Mol63, O’C17, RR95].
Needs [Rut19c].
Neue [EMR07].
Nelson [dCA37, Ano36a, Ano46a, Ano64, Ano66e, Ano66b, Aro65a, Aro66, Bad04b, Boh37, Bra37, Bur64, Cha37, Coc63, Eva39a, Eva39b, Eve37, Har38, M.39, Osg66, Seg66, Sni37, Sod37, Som38, Tho37a, Tho37b, dB32, Badxx, Bru64, Cha65, Cha14a, Cha14b, Cha14c, Cra71, Dai50, Foc37, Gei38a, Har38, Jar08, Mil38, Mol63, O’C17, RC62, Seg80c, Seg62, Seg64].
Neodymium [KG91].
Neon [BVI88].
Neon- [BVI88].
Neuere [Hou30].
Neuesten [Rut09d].
Neutral [KKGW85, Gro89, HFD+, 99].
Neutrals [vBD89].
Neutrin [Nav06].
Neutron [Cha32a, Cha32b, Cha33, FR13h, GLR06, Pol91, Rog13, Rut35e, Bad83, Bro97, Bur13a, Bur13b, Bur15, Hs39, LSN+, 09, LxW99].
Neutron-Induced [GLR06].
Neutron-Irradiated [LxW99].
Neutron-Rich [LSN+, 09].
Neutronen [HS39].
Neutrons [Elf14, GLR06, HS89, Cl01].
Newer [Bad66, Dav37, Rut37a, Rut37b, Rut14].
Newnham [Rut37a, Rut14].
News [Ano31b].
Newton [Tho08a, Ano09a, Ano18c, Biih98b, Fea72, Tho08a, Tho08b, Wal18].
Newton [Biih98b].
Ni [AAPP06, SHA109, SCP+, 91, Wuy91].
Ni/Au/Te [Wuy91].
Ni/Si [AAPP06].
Nicht [CSW97].
Nickel [BPSW91].
Nickel-Implantation [BPSW91].
Nicole [Mon66].
Niels [AH13, Bro73b, FK85, Kle10, Moo66, Rub97].
Nineteenth [Tho65].
Nineteenth-Century [Tho65].
Ninety [HJS70].
Niobium [Rot74].
Nitrid [ATS86, Bur86, Hwa82, Hwa83, Vas90, Wan96].
Nitrogen [Ano22, Rut19h, RRKH94, Rut10a, Whi82, Rut19g].
Niveis [dAMxx].
No [Ano23b, Ano09c, Kra76].
Nobel [Adl03, Ano37i, Cl018, How58, Jar08, Lau37, Adl12, Ano08b, Ano09a, Ano16, Cam00, CSW96, CSW97, Ph35, Ph36a, CS14a].
Nobelpreis [CSW97].
Nobelpreisträger [Tho08a].
Nomenclature [Rut10e, Rut13i, RG11].
Non [Ole81, RRKH94, BP93, LMC97, Low97].
Non-Rutherford [RRKH94, BP93, LMC97].
Non-Technical [Ole81, Low79].
Nondestructive [BSS88].
Normal [Rut11e, WZS+, 91].
North [Whe18].
Northern [Whe18].
Northumberland [Ano17b].
Note [Dem03, RS02d, RS02e, Rut05d, Rut11f, Rut12c, Rut29f, Rut16e, Rut05j].
Notes [AG13, Ano02, Cha64, Eic72].
Nötige [RM00b].
Novel [DM96, Nic32, Rut16c].
November [Ano48, Lov75, Rut27c, Rut27j, Rut28a, Rut28g, Rut29j, Rut29k, Rut30a, Rut30h, Rut37a, Rut14].
Novodobá [Rut38b].
Noyau [Hei34].
Noyaux [CCJ+, 34].
Nuclear [AK11, All64, dCA56, dCA58, Ang00, Ano94, Ano00b, Anoxxa, Anoxxd, Bad83, BB36, Boh61, Bri65, DMPA08, Fre12, Gam30, Gea62, Gra64, Gra64, Hug12, Jen00, Lai14, Mas72, OKR35b, OKR35a, Rut20g, Rut20e, Rut06c, Sea88, Seg85, Sze86, She83b, Stu94, Tr675a, Ad72, AG13, And73, Ano17d, Bad05,
oxides [Sin93, TF89, Win94]. Oxygen [ERM95, Rut19g, Cat93, NFM\textsuperscript{+}07, RRKH94]. oxynitrides [TGDS99].

P
[Ano66a, Kap66b, Mon66, Pia24, Tre76a, Whe04, MCJK90, SSWB80a, Sad81]. p-phenylenevinylene [MCJK90]. P. [Lov76, Rad13]. P.R.S [Boh26]. Packaging [KT84]. Paid [Ano37i, Lau37]. Palace [Hil17]. Palladium [PNFO88]. Palmerston [Dun18]. Pantheon [Dys05]. paper [Rut12c]. Papers [Ano33c, Ano64, Aro65a, Aro66, Bur64, Cha14a, Cha14b, Cha14c, Coc63, Osg66, RC62, Seg62, Seg64, Seg66, Stu79b, Ano66e, Cha65, Rez71, Rez72, Rön58, RC63, RC65, Whe04, Wri64, Kap74]. parallel [Dow08]. Paramount [Kae39]. Paris [Ano48, Oli47, Ano19]. Park [Wil15]. Part [Mos13c, Ano16, RS02j, RS02i, RS02k, RS02l, Coh89, Coh91, Coh92, Mor84, Mos14b, RS02f, RS02a, RS02g, Rut04g, Rut04h, Rut20b, Rut20c, Rut20d, Rut21a, Rut21b, Rut21c, Rut22j, Rut22k, Rut22l, Rut22m, Rut22n, Rut22o, Rut26b, Rut26c, Rut26d, Rut26e, Rut26f, Rut26g, Rut26h, Rut26i, Rut26j, Rut26k, Rut26l, Rut26m, Rut26n, Rut27a, Rut27b, Rut27c, Rut27d, Rut28a, Rut28b, Rut28e, Rut28f, Rut29b, Rut29c, Rut29d, Rut29e, Rut30a, Rut30b, Rut30c, Rut30d, Rut30e, Rut35f, Rut35g, Rut35h, Rut35i]. Partial [Rut51]. Particle [Ano08a, Ano32a, Fea77, Mal71, Ano00a, RG08d, RR08e, RR09b, RR09d, Rut23n, Rut23o, Rut24j, Rut66a, Wei11, Fea79, NM12, Rut06l, RG09a, RR09c, Rut23m, vdB07]. Particles [Mar61, Mos12a, Nia98, OH64, Rut06k, Rut08a, RG08a, RG08c, Rut08f, RW16, Rut19e, Rut19f, Rut19g, Rut19h, RC21a, Rut21e, Rut23k, RC24a, RWL31a, RWL31b, RL833, RR34, WR31, GM09, GF10, GR12, GM13, Hei68, Leo05, Rez24, Rut92, RH06a, RH06b, Rut06m, Rut07g, Rut07h, Rut07j, RG08b, Rut08c, Rut08d, RG08c, RG09b, RG10, Rut11i, RN13, RR13a, RR14, Rut16d, Rut19b, Rut21g, RC22, RC24c, Rut24l, RC25, RC27, Rut31d, Rut31c, Rut34g, Rut10a, Rut12, Tre74b]. particulate [TR96]. Particules [Rut06a, Rut07h, RG08b, RG08c, RR09a]. Partnership [Coh07]. passage [TR96]. Passing [Rut06k, Rut06l]. passion [Hil17]. Past [vG95]. path [Fow83, Gan17]. path-breaking [Gan17]. Patrick [Lov75]. Paul [Kle10]. Pauling [Gri09]. pay [Ano37j]. Payot [Mon66]. Pb [Cat93, ERM95]. PBFA [KL\textsuperscript{+}90, LSK\textsuperscript{+}88]. PBFA-II [KL\textsuperscript{+}90, LSK\textsuperscript{+}88]. Pd [SCP\textsuperscript{+}91, vdK89]. Peace [Ano16]. peak [Wie78]. Penetrating [GRR\textsuperscript{+}31, Rut02b, RC03, RbCENdCA14b, Rut29h, Rut02c, Rut14g, Rut17]. People [Ano02]. perihelion [Far87]. Period [Hol30, Coc46]. Periodic [Rut34o, Kra13, vdB07, vdB13]. periodische [vdB07, vdB13]. Perry [EM07, Tip13]. Personaggi [Seg76]. Personal [Ano02, Ano04a, Ano08c, Cha64, Dal50, Kay63, Oli72b, Coc46]. Personalities [Seg76, Ano04]. Perspective [RN04, Seg85]. perturbations [HZ15]. perturbed [Agu96]. Petite [Mon66]. Petr [Rut97]. Phase [Mar72, Yuh92, AAPN06, CFMO12, DJBW83, Lu87]. PhD [Ano99]. phenylenevinylene [MCJK90]. Philosophical [Ble57]. Philosophy [RN04, Mor75]. phosphorus [HHAMS93]. photo [CBZ\textsuperscript{+}12]. photo-induced
photo-voltage [CBZ +12]. photodissolution [REJ86].

photoelectron [And90, Bra98, Bur86, CSN +00, Sin93, Vas90, Win94]. Photographic [GR12]. Photonic [SC13]. photoresist [RKL88, vIS89]. Phys [Hwa83]. Physical [Cat93, Har07, Har60, Hei71, Rut09i, Rut13e, Tre79a, Ano12b, RCO54].

Physicians [Sla13]. Physicist [Ano07, Ano37i, Ano37j, RC04, RCRC05, Bad94b, Badxx, Gant8, Ge66, Hei77, Mehh73, Wal18]. Physicists [Bar71, Pod10a, Sla13, Ada72, Bad05, Bre97, Cam79, Cli65, Cli87, Cro01, Seg80a, dR85]. Physics [AK11, Ang00, Ano20a, Anoxxa, BB36, Boh63, BS79, Bur82, Cro74a, Dea03, DMPA08, Eve06, Fie62b, Hei79b, Hon03, Hug12, Kae69, Mehh73, Mot63, Pod10a, Pye78, RN04, Rut27i, Rut38a, Sei86, She80b, Sin81, Stu79b, Stu85, VRWB12, Wei70, Weh80, AG13, Ano95, Ano17d, Ano18b, Bad83, Bey49, B¨uh98b, Cli87, Con62, Gam85, Hagi7, Har28, Hei79a, Hen84, Hug93, Hug00, AG13, Ano12a]. Physik [B¨uh98b, Rut09b, Rut09c].


Presentation [KH23]. presents [Ano18d].

President [Ano23b, Rut28g, Rut09i, Rut27e, Rut28a, Rut29j, Rut29k, Rut30a, Rut30b, Rut31a, Rut31e]. Presidential [Rut23p, Rut23s].

Press [Bro86, Dav37, Hei71, Sy85]. pressure [Hwa82, Hwa83, YHS97]. Pretreatment [ERM95]. prevrashhenija [Rez28]. price [CSW97].


Proceedings [Raz63, AK15, Stu79a, WH72, Bir61, Wel90, Hay63]. process [IYT+09]. Processes [Rut03g, STB+01]. Produce [RM00b, RM00a, RM01].

Produced [HS89, MR14, Rut99, Rut00a, Rut10f, Rut12f, Rut00c, Rut00d, Rut00f].

Product [Ano37i, Lau37]. Production [Bo106, Rut07i, Rut07e, Rut28c, BR11a, BR11b, BR11c, CAN88, Rut07b, Rut07k, RB15, BR11d, RB09].

Products [MF11, Rut05i, RP07, Rut04n, Rut04j, Rut05o, RR13b, Rut05g].

Profession [Ged16]. Professor [Cro74a, FR13i, Ano04b, Ano04c, Ano08d, Ano08e, Ano08f, Ano08g, Ano09a, Gri09, Hah62, Rut29f, Sod02, Sod03].

professors [Ble02].

Profile [Ano59, ATS86, Cle81, IYT+09, LRF86, ZCS+12]. profiles [MCJK90, PMCF+06, SLA+00, Win94]. profiling [BS888, MBS+04, NJS+03, PPA+02, vIS89]. Progress [Rut33b, Ano33d, Ano18b]. Project [Mar61, Ree15a, Sch15]. Projectiles [Rut19a, Rut23a, Rut23b, Rut23c, Rut23d, Rut23e, Rut23f, Rut23g, Rut23h, Rut23i, Rut23j, Rut32a]. Projector [Eic72]. Proof [HS89]. Propagation [Hon03, Rut26g]. properites [Ev05]. Properties [Rut05k, Rut06h, Rut08i, Rut10c, Rut10d, Rut24e, Rut24f, Rut24g, Rut24h, Rut28c, Cat93, CCJ+34, Mak08, Rut05m, Rut06i, Rut06j, Rut23a, Rut23b, Rut23c, Rut23d, Rut23e, Rut23f, Rut23g, Rut23h, Rut23i, Rut23j, Rut31f].

Proportion [RB05a, RB06b, RB06a]. propriétés [CCJ+34].

Prospect [Ano23b]. Protection [Rut36g, Rut36j, Rut36k].

Proton [BP93, Rom97, Ano17b, YHS97]. protonated [HW92]. Protonen [MMKS+80].

Protons [Ano32b, CW32, Elf14, OR33, OKR33, Clo18, MMKS+80]. prouton [Rom97]. Pt [NBG+84, OaHNMO, SCP+91]. Public [Nic32, Rut34m].

Publications [Foc39, Pip01, Sin81, Stu79b]. Published [Aro66, Kay63, Seg62, Seg64, Seg66]. pulse [Wie78]. pulsed [YHS97].


quality [KIS+89]. Quanta [Kle66, dB70]. Quantentheorie
[Gam28, Gam29b, Hou30, Pol60]. **Quantitative** [Par96, PMCF+06].

**Quantities** [RC12a, Eve05, Rut05j, RC12a]. **Quantum** [JBS12].

**Quantum** [Hon03, Nia98, AH13, Bai13, Cli65, Cli87, Con62, Gam28, Gam29b, Gam85, Hou30, KHFA67, PPA+02, Pol60, SC13, Tem89].

**quarks** [Clo18, Seg80a]. **quarter** [Ano33d, Rut33j].

**Québec** [Ano09b]. **quelques** [RC12a]. **questioners** [Cli65].

**question** [And73]. **quote** [Ano50].

**R** [Pia24, Sin81, Stu79b, Whe80, dB14]. **Race** [Dys05, Cat04].

**radar** [Fra05].

**radiation** [FR13e, Hes00, MM12, Pod10a, Rut97a, RO99, Rut99, RC03, Rut04g, Rut04h, Rut04a, Rut06b, Rut11a, Rut28c, Rut29a, AB09, Jor16, Rut97c, Rut00d, RG02a, Rut06n, Rut17]. **Radiations**

[MR14, Rut12f, Rut15i, Rut15g, Rut15h, Rut16b, RCE30, RCE51, Rut10b, RB02a, Rut12g, Rut13b, Rut13f, Rut13g, Rut29h, Rut35f, Rut35g, Rut35h, Rut35i, Poo52, Mil13, Sch31]. **Radio** [Ano08a, Bar06, MG12, McG84, MF11, Rut00c, Rut02b, Rut03c, Rut04l, Rut04c, Rut05p, Rut05h, RB05b, Rut06a, RB06b, RG08a, Rut13f, Rut13i, RC19, Rut04, Rut07a, Sod04, Cat93, Rut00g, Rut00b, RS02i, vdB13, Tre79b].

**Radio-Active** [Rut04l, Rut05p, RG08a, Rut13i, MF11, Rut01c, Rut02b, RB05b, Rut06a, RB06b, Rut13f, Rut00g, Rut00b, RS02i].

**Radio-Activity** [Ano08a, Bar06, MG12, Sod04, Rut00c, Rut03c, Rut04c, Rut04k, Rut05h, RC19, Rut04, Rut07a, RS02i, Tre79b]. **radio-frequency** [Cat93]. **radioactifs** [RB06a]. **Radioactive**

[Ano37i, Bad68, CDE+31a, CDE+31b, CDE+31c, Fre79, Hol30, Lau37, Poo52, Rut06b, Rut06e, Rut06f, RL07, Rut08a, RG08e, Rut08f, RR09d, Rut11c, Rut12g, Rut27f, RCE30, Rut35e, RCE51, Rut07b, Sch31, Tre71a, Tre76b, CR21, Mak08, Rut00c, Rut01b, RB02a, RG02a, RS02j, RS02k, RS02i, Rut02c, RG02b, RS02h, RS03a, Rut04m, Rut04i, Rut04b, Rut04a, Rut05b, Rut06n, Rut07h, Rut07j, RG08c, RG09b, RR09b, RR09a, RG11, Rut11e, Rut12a, Rut12b, Rut12c, Rut12h, RR13a, RR14, Rut27l, Rut27h, Rut10b, Ano31a, Mec14, RS03b, Rut03g, Rut13b, Rut13g, Hub13, Mil13].

**radioactives** [RB06a, Rut07h, RG08c, RR09a, Rut12b, Rut12c].

**radioactivists** [Hug93, Lon16c]. **Radioactivité** [Rut05c, Cur10].

**Radioactivity** [Adl97, Ano00b, Ast70, Bar65, Bar05, CR21, FR13g, GLR06, GLR12, GT95, Hug12, Kra12, Mon66, Roe95, Rom64, Rut00a, Rut01d, RA02b, RS02c, RS02h, RS03c, Rut05d, Rut05f, Rut08g, Rut11d, Rut22j, Rut22k, Rut22l, Rut22m, Rut22n, Rut22o, Rut22h, Rut22i, Rut35b, Rut35c, Rut36h, Rut37g, Sod03, Tre71b, Tre71a, Tre75c, vG95, Bad69, RS02b, RA02a, RS02f, Rut02a, RS02j, RS02k, RS02i, Rut02d, RS02a, Rut02e, RS02g, Rut03h, RS03d, Rut03d, Rut04d, Rut05c, Rut05f, Rut06d, Rut09l, Rut24c, Rut32b, Rut86, Rut00f, Rut07a, Rut36f, Rut15, Fea70, Hei71, Oes70].

**Radioaktive** [Rut13b, Rut00e, RL07, Rut13g]. **radioaktiven** [Ano31a, RG02a, Rut02c, RG09b, Rut11e, RR13a]. **radioaktiver** [Rut01b, Rut04b, Rut05b].

**Radioaktivität** [RS02b, RA02a, RS02a, Rut02d, Rut02e, Rut07a, Rut32b, Rut36f, Rut15].
ERM95, EMVK90, EC38, Eve39, Eve13, Far63a, Far87, Fea40. **Rutherford** [Fea62a, Fea62b, Fea72, Fea73a, Fea73b, Fea77, FLK92, FR13b, FR13c, FR13d, FR13a, FR13f, FR13e, FR13g, FR13h, FGM+00, Fla17, Flo70, Foc39, Fow72, Fow83, Frel2, FLP+89, FTT96, FIY+99, Fu13, GHCA91, GW73, Gar62, Gea61, Gei38b, Geo38, GR89, Goo10, Gor55, Gra02, GC00, Gre07, Gri09, Gro89, Gu38, GRS+91, HM51, Hah62, Hah67a, HV84, HRM79, HHAMS93, HFD+99, HH96, HNS+11, Han82, Hei68, Hei79b, Hei81, Hei03, Hei67, Her84, Her77, HKM+07, HKM+09, He80, Hoo58, HW92, HZ15, HBA77, Hug08, Hug12, HG+94, Hwa82, IYT+09, IF94, Ish83, IOI+11, Jac72, Jen11, JBS12, JBS12, Kac39, Kap73a, Kap66a, Kap66b, Kap73b, K93, Kat12, Kat15, Kay63, KLL+90, KKK+99, KOhM94, KBvB+05, KSKF93, KIS+89, KY11, Kot91, KG91, Kra12. **Rutherford** [Kru75, KKGW85, KS76, LHB+09, Lab38, Lai37, LHNG14, Lau37, LRF86, LGA+06, Lee98, LSK+88, LSN+09, LDM91, Lew72, Lia80, LGF+99, LEM65, LMC97, LxW99, Liv62, Lon16c, Lon16d, Lon16b, Lor88, Low79, Lu87, LCL+04, Liu13, MDJF83, Mac11, MD69, MB90, Man82, Man76, Man77, Mar61, Mar72, Mar38, Mar54, MM03, MCJK90, Mas72, Mc84, McK62, Mec14, MSB+37, MBS+04, MMKS+80, Moo74, Moo78, Mor75, Mot63, Mot72, Mur13, NJS+03, NFM+07, NOSK08, NOH+10, NMSK13, NLO0, Nor79, NBS+84, OS+71, O+72, Oeh86, OaHM08, Oli47, Oli72a, Oli84, Oli85a, Opp64, OH64, Pac15b, Par96, PAF+98, Pei88, Pei97a, Pei10, PPA+02, PBtt83, Phi83, PNFO88, Pip01, Pod10b, Pol60, PMCF+06, PCK+08, Rad13, RRKH94, RR95, Ram75, RMM+13, RCC04, RFF+01, RSDS+89]. **Rutherford** [Ree08, Rei79, LFA+04, Rei71, REJ86, Rei81, Rei88, Rei98, Rei99, Rom97, Row55, Row57, Rus37, Rus51, Rut26a, Rut27k, Rut29f, SSSB80b, SSSB80a, Sad81, Sar79, SER+01, See65, Seg80b, Sei86, SHAI09, SC13, SBE086, Sha87b, SN05, SWZ+05, Sha37, She83a, SCP+91, Shi72, Sho82, STB+01, Sze11, Sim82, Sim93, Sku89, SLA+00, SDD+08, Sme97b, Sme97a, Sno58, Sno67, Sno68, Sod02, Sod03, SR37, Sta61, SN67, SHC96, Stu79b, Stu85, Stu86b, Stu85, SML91, Sut01, SPL+08, Tab97, TVBO+92, TMO+95, TCY97, TJ11, TF89, Tem89, Ter38, Ter67, TMJ+99, Tho8a, Tho8b, Tho48, TGP11, Tho65, Tho70, Til96, Tiz46a, Tiz46b, Tod14, TGD899, DJRS03, Tre71a, TMGR74, Tre74a, Tre74b, Tre75d, Tre76b, Tre77b, Tre79a, Tre79b, Tre83, VPW14, Vas90, Vio05. **Rutherford** [VV09, WCGC86, WZS+91, Wan96, Wei11, W107, Wer23, WMT01, Whi82, Wic65, Wi15, Wil74, Wil83a, WVCW76, Win94, WM88, WVD+96, WVH+99, WYY+99, WCZ+02, Wuy91, Wyb72, YKH+84, YHS97, Yuh92, ZW+02, ZCS+12, ZB74, Zim69a, Zim69b, del79, vB79, vBG090, vBB+92, vIS89, vK89, vLB82, vL01, vL02, vL05, vL11, vL15, vL20, vL21, vL22, vL23. **Rutherford-scattering** [DBvdV87, SML91]. **Rutherford**. [Lin40]. **Rutherfordium** [Cam97]. **Rutherfords** [Tre74b].
[NJS+03, YKH+84, AAPN06, CFMO12, DGC07, FTT96, Gro89, KBvB+05, KEJ87, Lu87, LCL+04, NFM+07, SSWB80a, Sad81, TJRS03, WZ+91, WCZ+02, Yuh92, ZWJ+02, vIS89, vdK89]. Si-depth [vIS89]. Si-Rich [KEJ87]. sic [Ano09a, BKP+06, KIS+89, SPL+08, ZWJ+02]. SiD [YKH+84]. Sidey [Ano36a, Ano46a]. Sidgwick [Rut37a, Rut14]. Sigma [RSWE27]. signal [Lia80]. Significance [Fre79, TGMR74]. Significantly [WM88]. SiH [YKH+84]. silicate [IYT+09]. Silicide [AAPN06, KEJ87, Bra98, Her84]. silicon [ATS86, BPSW91, BVI88, Hwa82, Hwa83, IYT+09, KIS+89, LRF86, MB90, Oeh86, Sin93, TGDS99, Wan96]. silicon/nitride [ATS86]. silver [LRF86, TGP11]. Simple [Sei86, Stu85, Tre85, FLK92, Wil83a]. Simulated [BJW97]. Simulation [Bis90, Eic72, BPSW91, Hau82, TJRS03]. Simulator [Wic65]. Simultaneous [SDD+08]. Since [AK11, Ano37d]. Single [Dav71b, MKM+07, Fow83, KIS+89, Rei79, Sad81, Whi82]. single-crystal [Whi82]. SiO [NFM+07, CSN+00]. Sir [Ano66b, Ano66d, Ano66c, Aro66, Coc63, Osg66, Rut27e, Rut27j, Rut28a, Rut28g, Rut29j, Rut29f, Rut30a, Rut30h, Rut31a, Rut31e, Sch31, Seg62, Seg64, Seg66, Ano19, Ano23b, Boh26, Bro97, FR13i, Gar62, RSWE27, Rut26a, Seg80c]. site [Ano18a, RSpS+89]. situ [HV84, KKGW85, NFM+07, SBE86, WM88]. six [Sod02]. Sixteenth [Rut36h]. siitieth [HM31]. Sixty [FR13j]. skilled [Fia17]. Sklodowska [DMPA08]. Sklodowska-Curie [DMPA08]. slept [Bre97]. Slow [Rut04j, Rut05i, Rut05g, Rut04n, Rut050]. small [Kru75, Man77]. small-angle [Kru75, Man77]. Smaller [Rut02f, Rut05j]. SMTah [Kae36]. Smasher [Ano37i, Lau37]. Smashing [Ano32a]. Sn [CFMO12]. sobre [dAMxx]. social [Bad05]. Society [Ano18d, Rut36k, SG85, Gri09, RCO+54, Rut36f]. Soddy [Ano09b, Fle57, Gar81, How58, Kau86, Man66, Stu78, Ano10, Asi64, Ble02, Coh97, Far63b, Fre79, Gani18b, Gus12, How58, Jen85, Ken63, Mer96, Pan57, Pan64, Rus65b, Rus65a, Rus61, TG36, Tre71a, Tre77b, Whe04, Wil64, Wil69]. Soft [RdCENdCA14a, Rut14f, SER+01]. softened [TGP11]. Solar [Ree06]. sole [Ril70]. Solid [CFMO12, DJBW83]. Solution [Ano32a]. Solutions [Rut05d]. Solvay [CCL+94, Far01, CCJ+94, Str11]. Some [dCA68, Ano23b, Boh61, Cha64, Dal50, Eve06, Fea77, Fea79, Hah62, Har07, Lew72, OKE35a, Oli72b, Rut96b, Rut97b, Rut06h, Rut07f, RC12b, Sod03, Zim69b, Rut06i, RC12a, Ano33c, Rut03e, Rut05k, Rut05m, Rut06j, Rut08i, Zim69a]. Sommerfeld [Lak96]. son [Jen08]. sonar [Kat12]. sorta [Sno68]. Sought [Kae36]. Sound [BR16, Lid13, Rut15d]. source [CGL+94, DJA+04]. Sources [GLR06, KHFA67, Rut06b, Rut06n, RC24c]. sous [CCJ+94]. Soviet [Ano37k, Ano37l, HF60]. Sovremennaja [Rez38]. Sowjetische [HF60]. space [Bro18, Duf18, Wil15]. species [KKGW85]. Spectra [Mos13c, Mos14b, Mos14a, Rut14k, Rut15e, Rut14i, Rut16c, Wie78]. Spectre [RR07, RR08a]. spectrograph [KLL+90, LSK+88]. spectrographs [FLK92]. spectrometer [HKH96]. spectrometries [SCP+91]. Spectrometry [CLZ99, ERM95, MKM+07, JBS12, SHCK96, BPSW91, Bur86, CFMO12, Cle81, CSN+00, CCR85, DJA+04, ESRDV84, FLP+89]
structures [NMSK13, SSWB80b, SSWB80a]. Struktur [Rut24a, Rut24b]. struktur [Rez29, Rez32]. Stuart [Lov75]. Student [BELG68]. Studied [OaHNM98, ATS86, Bha82, CYM03, Eld85, IFSI94, KBvB05, LCL04, MBS04, SHAI09, Sin93, TGP11, WYV+99, WCZ+02, Yuh92, ZWJ+02]. Studien [Mos13b]. Studies [Dav71b, FR13g, Rut25f, Rut25g, SHCK96, WCGC86, YKH+84, Bey49, BBR80, GRS91, Nor79, Oeh86, PAF98, SSWB80a, Sad81, TF89, TMJ+99, Whi82]. Studying [dCENdCA58, Dav71a]. sublattices [ZWJ+02]. submarine [BC16, Kat12, Rut15j, Rut15k, Rut15l]. submarines [FR18, Rut15f]. Subsequent [Jen85, Fra05, Sad81]. substance [Rut00g, Rut00b, Rut00e]. Substances [Cha12, Mil13, Rut00a, Rut01c, Rut02b, Rut08a, RG08a, Rut08f, RR95, Rut10f, RCE30, RCE51, CR21, Mak08, Rut00f, Rut01b, RB02a, RG02a, Rut02c, RG02b, Rut07b, Rut07j, RG08c, RG09b, RR09b, RR09a, Rut12a, Rut12b, Rut12c, Rut12g, Rut12h, Rut13b, Rut13a, Rut13f, Rut13g, Rut14, Rut10b, Ano08a, Poo52, Sch31]. Substanz [Rut00e]. Substanzen [Mec14, RG09b, Rut13b, RR13a, Rut13g, Rut01b, RG02a, Rut02c]. substrate [LCL04]. substrates [FIY+99, IFSI94, IOI+11, PBFt83, TGP11]. Subsurface [DGC07, SSWB80b]. Subtraction [Lia80]. Succeed [Ano32b]. Success [Ano32a, Bad79b, Tre75d]. Successful [Ano08a]. Succession [Rut04i, Rut05p, Rut04i]. such [Gri09]. suggests [Gan18b]. Suicidal [Bad79b]. sulfur [RR95]. Summary [Eld85, Tho84]. Summer [Ano36a, Ano46a, Hah67a]. Summer-Time [Ano46a, Ano36a]. Sun [Bah00, Tip13]. sunshine [Har05]. superconducting [FLP+89]. Superconductors [CLZ99]. Superheavy [Kra13]. superlattices [Sar79]. supersonic [Rut16c]. Supports [WMT01]. suppression [HZ15]. supreme [Cam98, Cam99, Pip01, Ced00, Her01a, Her01b, Hub01, Tur01]. Surface [CGL+94, Dav71b, MKM+07, NOSK08, NMSK13, Nor79, RC03, SHCK96, Tho84, CBZ+12, FLP+89, GHCA91, KBvB+05, NOH+10, OHN+09, SLA+00, Yuh92]. Surfaces [Dav71a, MD69]. Surfactants [LGA+06]. surprised [Tre83]. surveillance [BC16]. Survey [Dav37, Rut34g]. sustained [And73]. Svedberg [Mos13b]. Swift [CW32, Moo78]. switchable [SHAI09]. symmetric [RFF+01]. Symposium [Meh73, Tre75b, Wyb72, Stu79a, Stu79b]. synthesis [Rut34g]. synthesized [KKK+99, WVD+96]. System [Ree06, vdB07, vdB13, AAPN06, Eld85, HFD+99, HKH96]. systems [PCK+08, RMM+13].


Teil [RS02a, RS02b]. Teilchen [RG09b, Rut31d, Rut31c, vdB07, RR13a, Tre74b]. Teilchens [Rut07g, Rut08c, Rut08d, RG09a]. telluride [Man82]. Temperament [SMJ35a, SMJ35b]. Temperatur [Rut01b]. Temperature [RP07, Rut30i, Bha82, DGC07, DBvdV87, FLp+89, LCL+04, Rut01b, vBBGO90, vBBD+92].


TEXTOR [TvBO+92, vBBGO90]. Thaddeus [Gar81, Stu78]. Thales [Lak96]. Theater [Hil17]. Their [Kae36, Mil13, Ole81, Rut19a, Cla13, Mak08, PMCF+06, Ree28, Rut11e, Rut12g, Rut13b, Rut13f, Rut13g, Rut23a, Rut23b, Rut23c, Rut23d, Rut23e, Rut23f, Rut23g, Rut23h, Rut23i, Rut26f, Rut26g, Rut30b, Rut30c, Rut30d, Rut30e, Rut32a, RB32, Seg80a].

Theoretical [Lon03, Meh73, Hei34]. Theorie [Rut09b, Rut09c, vW35]. théoriques [Hei34]. Theory [Ang00, Ano32b, Gea14a, Kap74, KH23, Mon66, Mot72, Rut10f, Rut29i, Rut37g, Rutxx, Sod04, Tre71b, Tre71a, Tre75c, Tre75d, Cha76, Cli65, Cli87, Gam28, Gam85, Han30, Lev17, Pol60, Rut09k, Rut09b, Rut09c, Rut36f, Rut36h, Sch57, vW35]. Therapy [Sla13]. thermal [GHCNA91, Lu87, PMCF+06]. Thermodynamics [Kle66]. thick [ZCS+12]. thickness [CSN+00, CCR85]. Thin [JBS12, LHB+09, Mar61, SCP+91, And90, Bur86, Cat93, DHS97, DJBW83, FGM+00, FIY+99, GR89, HY84, IFSI94, IOI+11, KKK+99, PBFt83, Rei81, Sim82, SDD+08, TMJ+99, WVCW76]. Thin-film [SCP+91, HY84, Sim82]. things [Bat72, Bro18]. third [HBA77]. third-power [HBA77]. thirteen [Bey49].

thirds [Hen84, Sei86, Stu85]. Thirty [Gam85, Rut33h]. thirty-fifth [Rut33i]. Thomas [Dea03]. Thomson [Kra14b, Lak96, Ron58, Whe04, Kub11]. Thorium [FR13e, HS89, RO99, Rut00a, RS02c, RS02h, RW16, RWW+90, RVL31b, ESWW82, FlO70, GF10, Rut00g, Rut00h, Rut00c, Rut00e, Rut00f, RS02d, RS02e, RS02j, RS02i, RS02k, RS03d, RH06b, Rut11d, RR13b, Rut16d, Rut21g].

Thoriumverbindungen [Rut00c]. those [RCo+54]. Thousand [Ano22]. threat [BC16]. Three [And73, Eid48]. Thus [Ano32b]. Ti [Cat93, FGM+00, KKK+99, PCK+08, SCP+91]. TICN [PMCF+06]. Tiger [Gus12]. Time [Ano46a, Ano17, Kay63, Ano36a, DJA+04, Hah62, HKH96, Hei79b, Lev17, NMSK13, Sat18, SDD+08]. time-of-flight [DAJ+04, HKH96].


X [Ced00, Adl97, And90, Bau73a, Bau73b, BBR80, Bra98, Bra61, Bur86, CYM+03, CSN+00, CCR85, DHS97, HV84, KKK+99, KBvB+05, KSKF93, MD13b, MD13a, Mos14a, PAF+98, Pip01, PCK+08, Rön58, RB15, RBR15, Rut16c, Rut17, Rut18, Rut25c, RW25, Rut29a, SER+01, Seg80a, Sin93, Sku89, SDD+08, Vas90, Win94, WVH+99, WYV+99]. X-Ray [Mos14a, Rut29a, And90, BBR80, Bra98, Bra61, Bur86, CYM+03, CSN+00, CCR85, DHS97, HV84, KKK+99, KBvB+05, KSKF93, PAF+98, PCK+08, Rut16c, RW25, SER+01, Sin93, Sku89, SDD+08, Vas90, Win94, WVH+99, WYV+99]. X-Rays [MD13b, MD13a, Rön58, Rut18, Rut25c, Seg80a]. XCIV [Rut14f]. XCIX [RC25]. XCVIII [Rut12e]. Xe [Wan96]. xi [Bro86, Stu85, Har07, Rut00f]. xii [Bat72, Stu85, Szy85, RT09]. XIII [Rut06j]. XIX [RB04c, Rut05m, Rut06l, RR13e]. XL [TR96]. XLI [RS02g, Rut06m]. XLII [RH06b, RC22]. XLIII [Rut03d, Rut12h, Rut16d]. XLIV [RS03d]. XLVI [Rut06k, dB32]. XLVII [Rut03c]. XVI [Rut01e, Rut10g]. XVII [Rut17]. XX [Rut95, RC12b]. XXI [Cha12, RR09d]. xxii [Hei71, Rut06n]. XXIII [Rut08b]. XXIV [RR08c, Rut24l]. XXV [Rut05n]. XXVIII [Rut21e]. XXXI [Rut14g]. XXXII [Rut02h]. XXXIV [RR02b, RR13c, Rut14h, RBR15]. XXXV [Rut97a, RB15]. XXXVI [Rut05o, Rut14j]. XXXVIII [Rut14j].

Yale [Bro86, Hei71, Szy85]. Yarns [Moo78]. YBaCuO [HGM+94]. Year
[FR13], Coc46, RC13. **Years**
[Ano22, Ano32b, Ano45, Rog13, Rut38a, Rutxx, AK15, Ano95, Con62, DMPA08, EC13, Gam85, Gib17, HJS70, Kae48, Mor74, Sea88, Wel90, Wil60].

**Yesterday** [Ano09a]. **Yielding** [Ano32b]. **York**
[Ble57, Dav37, Sin81, Stu79b]. **Young** [App62].


Zn [CBZ+12]. ZnO [CYM+03, DJBW83, IOI+11]. Zr [Cat93]. zum [HM31, Har38, Lüd13]. zur [FH60, RM00b, Gam28, Gam29b, Har38, vW35]. zwischen [Rut04b, Rut05b].

**References**


Adlo:2003:CNP

Adlo:2012:NPA

Al-Ghazi:2013:NNP

Aguiar:1996:RLV

Aaserud:2013:LLQ

Al-Khalili:2011:NPS
REFERENCES

Aaserud:2015:OHY


Alexander:1946:LEP


Allibone:1964:RML


Adloff:1995:DR


Anderson:1973:TQA


Anderson:1990:AIA

REFERENCES

CODEN JVTAD6. ISSN 0734-2101 (print), 1520-8559 (electronic).


### REFERENCES

| --- | --- |
Anonymous:1908:PRBb


Anonymous:1908:PRR


Anonymous:1908:PRW


Anonymous:1909:DPR


Anonymous:1909:NSN


Anonymous:1909:RLD


Anonymous:1912:BRL

[Ano12a] Anonymous. Book review: *Lectures delivered at the Celebration of the Twentieth Anniversary of the Foundation of Clark*


[Ano20a] Anonymous. Physics at the British Association. *Nature*, 106(2663):357–358, November 11, 1920. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL http://www.nature.com/nature/journal/v106/n2663/pdf/106357a0.pdf. From this meeting report: “The results thus show that the elements may be considered as being composed of these hydrogen nuclei, or ‘protons’ as Sir Ernest Rutherford would have us call them, …” It is believed that this is the first published mention of the word proton.

Anonymous. Way to transmute elements is found: Dream of scientists for a thousand years achieved by Dr. Rutherford. new age, says Richardson. Remarkable result of bombarding nitrogen gas with the alpha rays of radium. Result of a chemical collision. Dr. Kendall on Rutherford. results of the discovery. energy of high power. *New York Times*, ??(??):34, January 8, 1922. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL http://search.proquest.com/hnpnewyorktimes/docview/100061168/.

Anonymous. A miracle of broadcasting — the BBC’s biggest experiment. *Radio Times*, ??(??):??, September 28, 1923. Cited in [Wil83a, page 466], with the quote “An historic milestone in the History of Wireless was reached the other night by the broadcasting of the Presidential Address of the world famous scientist Sir Ernest Rutherford . . . It was the first occasion in this or any other country on which the voice of a public man had been transmitted simultaneously through six wireless stations hundreds of miles apart and also made to operate loud-speakers at overflow meetings . . . Perhaps the most amazing result of the experiment was that the sound of the speaker’s voice was heard in the North of Scotland before it reached those who were sitting in the back of the hall in which he was actually speaking.”.


Anonymous. Atom torn apart, yielding 60% more energy than used. But two British scientists succeed only once in each 10,000,000 bombarded. Battered with protons. Hydrogen atoms are thus transmuted into helium — conservation theory seen upset. Tests made for 3 years. Dr. J. D. Cockcroft and Dr. E. T. S. Walton of Cavendish Laboratory, Cambridge explain work. *New York Times*, ??(??):1, May 2, 1932. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL http://search.proquest.com/hnpnewyorktimes/docview/99718000/.

Anonymous:1933:APW


Anonymous:1933:BAB


Anonymous:1933:BAS


Anonymous:1933:TAL


Anonymous:1936:AKS


Anonymous:1936:RLE


Anonymous:1937:ABR

Anonymous:1937:DLRc


Anonymous:1937:DLRb


Anonymous:1937:DLRa


Anonymous:1937:FLR


Anonymous:1937:LRa


Anonymous:1937:LRb


Anonymous:1937:LRM


REFERENCES


REFERENCES

55

Anonymous:1959:GCP


Anonymous:1960:BRE


Anonymous:1964:ERL


Anonymous:1966:RLR


Anonymous:1966:RSEa


Anonymous:1966:RSEc

Anonymous:1966:RSEb

Anonymous:1966:CPL

Anonymous:1971:ER

Anonymous:1971:RGR

Anonymous:1971:U

Anonymous:1972:RCC

Anonymous:1994:EOL
REFERENCES

1063-6145 (print), 1530-9274 (electronic). Correction of printers error in bottom three equations from page 90.


Anonymous:2005:RC


Anonymous:2006:MRD


Anonymous:2009:CAL


Anonymous:2009:ERF

Anonymous. Ernest Rutherford and Frederick Soddy, McGill University, Montréal, Québec. Web site., 2009. URL http://www.aps.org/programs/outreach/history/historicsites/rutherfordsoddy.cfm. From the site: “The English plaque read[s]: ‘At this location, Ernest Rutherford and Frederick Soddy, during 1901–03, correctly explained radioactivity as emission of particles from the nucleus and established the laws of the spontaneous transmutation of the elements.’”.

Anonymous:2009:NCL


Anonymous:2010:AHR


Anonymous:2016:CNP

REFERENCES


Anonymous:2018:PON


Anonymous:2018:RSC


Anonymous:2018:SHJ


Anonymous:20xx:ERF


Anonymous:20xx:LSH

Anonymous:20xx:RJN


Anonymous:20xx:RNW


Appleton:1962:YR


Arons:1965:BRCb


Arons:1965:BRCa


Arons:1966:BRC


Asimov:1964:FS

REFERENCES


REFERENCES


[Bad05] Lawrence Badash. American physicists, nuclear weapons in World War II, and social responsibility. *Physics*
REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES

Bohr:1926:SER

Bohr:1937:ORH

Bohr:1961:RML

Bohr:1963:EAP

Bohr:1987:EAPb

Boltwood:1905:LOR
REFERENCES


REFERENCES


Bragg:1961:RML


Bradbury:1998:TSC


Bragg:2004:R


Brescia:1983:RAR


Brennan:1997:HPS


Brenner:2000:RCR


BNMRA:1931:BID

[Bri31] British Non-ferrous Metals Research Association. A brief illustrated description of the headquarters and central laborato-


REFERENCES

Broc:2018:NST


Bru:1964:LRN


Brush:1979:SRE


Bunge:1979:RPT


Baumann:1988:NDP


Bührke:1998:LIW

REFERENCES


REFERENCES


REFERENCES


[Cat04] Brian Cathcart. *The fly in the cathedral: how a group of Cambridge scientists won the international race to split the


REFERENCES

Choi:2003:RBA


Curie:1931:ACR


Curie:1931:RCRa


Curie:1931:RCRb


Cederberg:2000:BRR


“almost certainly the first use of [electrical] counters in any major discovery in physics”. See also [Lew79].


REFERENCES


[CLZ99]
Cockcroft:1946:RLW


Cockcroft:1953:RML


Cockcroft:1963:BRC


Cohen:1940:BRR


Cohen:1988:MDE

REFERENCES


[Con82] Conway:1982:URB


[Coo13] Coolidge:1913:PRR


[Cot10] Cottrell:2010:RTB


[CR21] Chadwick:1921:RRS


[Cra71] Cragg:1971:LER


REFERENCES


Cockcroft:1932:DLS


Chen:2003:PAD


Dale:1950:SPM


Martins:20xx:CVH


Danin:1966:R


Darwin:1956:DAN

Darwin:1956:RML


Davis:1937:LRS


Davies:1971:RSC


Davies:1971:URS


deBaillehache:1914:RVV


deBroglie:1932:SWR

REFERENCES

Louis de Broglie. Mon anxiété devant le problème des quanta. (French) [My anxiety about the problem of quanta]. In Homberger et al. [HJS70], pages 181–188. ISBN 0-224-61914-4. LCCN AC5 .H64.


REFERENCES


[Andrade:1958:RML]

[Andrade:1968:SRE]

[Andrade:1964:BFR]

[Andrade:1958:WSS]

[Andrade:1964:RNA]

[Dean:2003:ISS]
Katrina Dean. Inscribing settler science: Ernest Rutherford, Thomas Laby and the making of careers in physics. *History of
REFERENCES


REFERENCES


REFERENCES


References

Earl:1966:MVR


Eve:1938:LR


EITE:2013:YRI


Ellmer:1996:ARB


Eichenberger:1972:NUO


Eidinoff:1948:STH


REFERENCES


---


---


---


---


---


REFERENCES


REFERENCES


French:1985:NBC


Flaig:2017:PER


Fleck:1957:FSB


Fehl:1992:SUM


Flower:1970:ERE

REFERENCES


REFERENCES

content/329/1576/1. Lecture delivered at Christchurch, New Zealand on 9 September 1971.

Fowler:1983:EIM


Flack:1933:CM


Fernandez:2013:RAN


Fernandez:2013:CR


Fernandez:2013:DGE


Fernandez:2013:ER

REFERENCES


REFERENCES


Gamow:1930:MDC

Gamow:1985:TYS

Ganesh:2017:CPB

Ganesh:2018:MBC

Ganesh:2018:SST

Garrett:1962:NAS
REFERENCES


REFERENCES


Gagnon:1991:RTA


Gibb:2017:YDC


Giudice:2012:BSL


Guerra:2012:DAR


Guerra:2012:DAR

REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


[Hei34] Werner Heisenberg. Considérations théoriques générales sur la structure du noyau. (French) [General theoretical considerations of the structure of the nucleus]. In Cockcroft et al. [CCJ+,34], pages 289–335. LCCN ???? Publiés par la commission administrative de l’institut.


REFERENCES


Heilbron:1974:HJ


Heilbert:1979:SPT


Heilbron:1979:PMR


Heilbron:1981:RBA


Heilbron:2003:ERE


Heilbron:2008:MHG

REFERENCES


Hessenbruch:2000:RER


Hartog:1999:DNB


Huttner:1994:HRR


Hartiti:1993:RBA


Hyde:1987:HAD


Hills:2017:TRE

[Hil17] Jo Hills. Theater review: Ernest Rutherford entertaining with a passion for science: Ernest Rutherford Everyone Can Science; Crystal Palace; Saturday August 19
REFERENCES


HOMBERGER:1970:CMN


HASEGAWA:1996:LER


HES:2009:DCB


Hahn:1931:LRS


Hashimoto:2011:ISH

REFERENCES


[HS39] Otto Hahn and Fritz Strassmann. Über den Nachweis und das Verhalten der bei der Bestrahlung des Urans mittels Neutronen entstehenden Erdalkalimetalle. (German) [Concerning the existence of alkaline earth metals resulting from the


[Hug93] Jeffrey Alan Hughes. The radioactivists: community, controversy and the rise of nuclear physics. Ph.D. disserta-
REFERENCES

129


Hughes:2000:AMN


Hughes:2008:WKS


Hughes:2012:RRO


Hamm:1984:SIG


Huang:1992:URB


Hey:1996:EM

REFERENCES


[Jen08] John Jenkin. *William and Lawrence Bragg, father and son: the most extraordinary collaboration in science*. Oxford Uni-
REFERENCES


[Kae36] Waldemar Kaempffert. Ultimate truths are sought in the atom. scientists, in their efforts to smash it, are shattering many of their old ideas as they near the rock bottom of the universe. New York Times, ??(??):SM6, March 24, 1936. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL http://search.proquest.com/hnpnewyorktimes/docview/101867279/.

REFERENCES

[135x681] REFERENCES

[135x625] Kaempffert:1948:RRB


Kapitza:1966:RLRa


Kapitza:1966:RLRb


Kapicy:1973:RUU

P. L. Kapicy. Rezerford | ucenij i ucitel' : k 100-letiju so dnia rozdenija. (Russian) [Rutherford — scientist and teacher: the 100th anniversary of his birth]. Nauka, Moscow, Russia, 1973. 211 pp. LCCN ???.

Kapitza:1973:RLR


Kapitza:1974:ETP

REFERENCES


REFERENCES

Krusin-Elbaum:1987:OSR

Kent:1963:FS

Kozanecki:1991:RBL

Kramers:1923:ABT

Kuhn:1967:SHQ


Klein:2010:PEN


Kensek:1990:DAR


Kimura:1994:MAR


Korff:2012:GMU


Kottke:1991:AES

REFERENCES


Kowarski:1953:HAN


Kragh:1976:END


Kragh:2011:RBA


Kragh:2012:RRA


Kragh:2013:SEU


Krause:2014:CHW


REFERENCES

Kubbinga:2011:TJJ

Kostinski:2011:RBO

Laby:1938:ERO

Laing:1937:ERO

Lakhtakia:1996:MMH

Laurence:1937:LRP

Lavine:2014:TFR
Matthew Lavine. The two faces of radium in early American nuclear culture. *Bulletin for the History of Chem-
Lu:2004:DDS


Leenson:1998:ERA


Lindsay:1965:RSA


Leone:2005:HNT

REFERENCES

Levin:2017:TCS

Lewis:1972:SRR

Lewis:1979:EDC

Lewis:2002:DGO

Reijnen:2004:RBS

Lee:2006:DSL

Liendo:1999:URF

LaRose:2009:HRR


Lansaaker:2014:CGN


Liau:1980:SSO


Lightman:2018:SSI


Lind:1940:BRR

REFERENCES


[Lon16c] Malcolm Longair. The Rutherford era — the radioactivists. In *Maxwell’s Enduring Legacy* [Lon16a], chapter 9, pages


Longair:2016:RES


Lorenz:1988:BBB


Lovell:1975:PMS


Lovell:1976:PMB


Lowood:1979:ERB

LRdB+23 H. A. Lorentz, E. Rutherford, M. de Broglie, R. A. Millikan, H. Kamerlingh Onnes, P. Weiss, L. Brillouin, W. H. Bragg,
REFERENCES


Makower:1908:RST


Malley:1971:DBP


Mann:1976:LRG


Mantri:1977:SAE


Mancini:1982:RBA


Marsden:1938:ERO


Marsden:1954:RML

Marcley:1961:ADP


Marquez:1972:DRS


Massey:1972:NPT


Miles:1985:FNZ


Madakson:1990:ABG


Miotti:2004:EDR


REFERENCES


[MD67] Walt McDayter and Norman Drew. The giants: The bomb builders. Denver Post, ??(??):??, February 3, 1967. URL http://library.ucsd.edu/dc/object/bb0103915g. This is a reasonably accurate 83-frame comic strip on the history of the building of the atomic bomb, with Leo Szilard as the central figure of the story.


REFERENCES


REFERENCES

Hess:2007:BEN


Moseley:1912:RRB


Marshall:2003:ERT


Marshall:2004:R


Mommsen:1980:RRA

REFERENCES


REFERENCES

Moralee:1974:HYC


Morrison:1975:RML


Morgantaler:1984:MAT


Moseley:1912:NBP


Moseley:1912:RMO


Moseley:1913:AHP

REFERENCES


REFERENCES


[Mey1937:FTL]


[Mur2001:AHC]


[Mur2013:MDL]


[Nav2006:EAD]

Norton:1984:KOO


Nakajima:2007:SOO


Niaz:1998:CRA


Nicolson:1932:PFN


Nakajima:2003:SPH


Nobes:2000:ROT

D. C. Nobes and B. Lintott. Rutherford’s “old tin shed”: mapping the foundations of a Victorian-age lecture hall. In D. A. Noon, G. F. Stickley, and D. Longstaff, editors, *Eighth...
REFERENCES


[NOSK08] Kaoru Nakajima, Atsushi Ohno, Motofumi Suzuki, and Kenji Kimura. Observation of molecular ordering at the surface of trimethylpropylammonium bis(trifluoromethanesulfonylimide...


REFERENCES

Oesper:1970:BRR


Osgood:1964:RHA


OHara:1975:GJS


Ohno:2009:OSS


Oliphant:1934:TEOa


Oliphant:1934:TEOb

REFERENCES

Oliphan

Oliphan:1933:TLP


Oliphan:1935:SNT


Oliphan:1935:ADE

Olesko
REFERENCES


REFERENCES


[PaetzgenSchieck:2015:RSA]


[Partyka:1998:XRD]


[Paneth:1957:TFS]


[Pan64]


[Pan96]

REFERENCES


**Petrov:1983:ACB**


**Priyantha:2008:IMA**


**Peierls:1953:RLA**


**Peierls:1988:RB**


**Peierls:1997:RB**

REFERENCES


REFERENCES


[Pol60] L. S. Polak. Die Entstehung der Quantentheorie des Atoms (Das Rutherford–Bohrscbe Atommodell). (German) [The emergence of the quantum theory of the atom (the Rutherford–Bohr atomic model)]. In *Sowjetische Beiträge zur Geschichte der Naturwissenschaft*. (German) [Soviet contributions to the history of natural science] [FH60], pages 226–242. LCCN Q125 1960. DM-Ost 17.50.

James Chadwick, who was born 100 years ago this month, discovered the neutron in 1932. One of his research students remembers those heady days of nuclear physics in the 1920s and 1930s.


Rutherford:1902:ERA


Rutherford:1902:ERI


Rutherford:1945:UAA


Rutherford:1929:DSA


Radvanyi:2013:DBP

Ramage:1975:CDR


Raz:1963:BRJ


Rutherford:1901:NGR


Rutherford:1902:CRR


Rutherford:1902:NGR


Rutherford:1903:HERa

REFERENCES


REFERENCES


REFERENCES


[RC12b] Professor Ernest Rutherford, F.R.S. and James Chadwick, B.Sc. XX. A balance method for comparison of quantities of radium and some of its applications. *Proceedings of
REFERENCES


**Rutherford:1919:RAG**


**Rutherford:1921:DEP**


**Rutherford:1921:LAD**


**Rutherford:1922:XDE**


**Rutherford:1924:BEA**


REFERENCES


REFERENCES


Ernest Rezerford. Iskusstvennoe rasshheplenie jelementov. (Russian) [Artificial splitting of elements]. *Uspekhi Fizicheskikh Nauk*, 3(2–3):198–213, February 1923. CODEN UF-
REFERENCES


[Rez38] Lord Rezerford. Sovremennaja alhimija. (Russian) [Modern alchemy]. Uspekhi Fizicheskikh Nauk, 19(1):18–48,


[Rez72] Ernest Rezerford. Izbrannye naučные trudy. (Russian) [Selected scientific papers]. Nauka, Moscow, Russia, 1972. 532 pp.


[RG08a] Ernest Rutherford and Hans Geiger. An electrical method of counting the number of α-particles from radio-active sub-

**Rutherford:1908:CNPb**


**Rutherford:1908:MEN**


**Rutherford:1908:CNPa**


**Rutherford:1908:IMC**

REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


[RR09b] Ernest Rutherford and Thomas Royds. The nature of the $\alpha$-particle from radioactive substances. *Jahrbuch der Ra-
dioaktivität und Electronik, 6(?):1–7, ???? 1909. CODEN JAREAS. ISSN 0368-1289.

[R] Rutherford:1909:NAP

[R] Rutherford:1909:XNP
Professor Ernest Rutherford, F.R.S. and Thomas Royds, M.Sc. XXI. The nature of the α particle from radioactive substances. 

[R] Rutherford:1912:WDR
Professor Ernest Rutherford and Harold Roper Robinson. Wärmevermehrung durch Radium and Radiumemission. (German) [Heat generation by radium and radium emanation]. 

[R] Rutherford:1913:MGR
Ernest Rutherford and Harold Roper Robinson. Über die Masse und die Geschwindigkeiten der von den radioaktiven Substanzen ausgesandeten α Teilchen. (German) [On the mass and speed of α particles emitted from radioactive substances]. 

[R] Rutherford:1913:LARb
Prof. Ernest Rutherford, F.R.S. and H. Richardson, M.Sc. LXXXII. Analysis of the γ rays of the thorium and actinium products. 
*Philosophical Magazine (6)*, 26(156):937–948, December 1913. CODEN PHMAA4. ISSN 1941-5982 (print),
REFERENCES


[Rutherford:1913:XHE]


[Rutherford:1913:LAG]


[Rutherford:1913:XAR]


[Rutherford:1913:LARa]


[Raisanen:1995:ADI]

[RR95] J. Räisänen and E. Rauhala. Angular distributions of $^{12}$C, $^{14}$N, and $^{16}$O ion elastic scattering by sulfur near the


[RSS02c] Ernest Rutherford and Frederick Soddy. LXXXIV. The radioactivity of thorium compounds. II. The cause and nature of radioactivity. *Journal of the Chemical Society, Transactions*, 81(??):837–860, ???? 1902. CODEN JCHTA3. ISSN 0368-1645 (print), 2050-5450 (electronic). URL http:
REFERENCES

//pubs.rsc.org/en/Content/ArticleLanding/1902/CT/ct9028100837. See also Part I [RS02f].


REFERENCES

197

<table>
<thead>
<tr>
<th>Reference</th>
<th>Title</th>
<th>Authors</th>
<th>Journal</th>
<th>Volume/Issue</th>
<th>Pages</th>
<th>Year</th>
<th>URL</th>
</tr>
</thead>
</table>
REFERENCES


[Rutherford:1934:DHH] Lord Rutherford, O.M., F.R.S., N. V. Sidgwick, F.R.S., F. W. Aston, F.R.S., Dr. P. Harteck, Professor F. Soddy, Dr. M. Polanyi, Professor E. K. Rideal, F.R.S., Professor R. H.
REFERENCES


Russell:1951:LRM


Russell:1956:FSI


Russell:1956:FS


Russell:1961:FS


Rutherford:1891:EE


Rutherford:1894:LMI


Rutherford:1895:XMV

REFERENCES


[Rut97b] Ernest Rutherford, M.A. A magnetic detector of electrical waves and some of its applications. *Philosophical Transactions of the Royal Society A: Mathematical, Physical, and Engineering Sciences*, 189(??):1–24, January 1897. CODEN PTRMAD, PTMSFB. ISSN 1364-503X (print), 1471-2962 (electronic).


REFERENCES


[Rut00f] Ernest Rutherford. XI. Radioactivity produced in substances by the action of thorium compounds. Philosophical Magazine
REFERENCES


[Rut01b] Ernest Rutherford. Einfluss der Temperatur auf die Emmanationen radioaktiver Substanzen. (German) [Influence of temperature on the emanations of radioactive substances]. *Physikalische Zeitschrift*, 2(??):429–431, ????? 1901. CODEN PHZTAO. ISSN 0369-982X.


REFERENCES


REFERENCES


REFERENCES

Rutherford:1903:XME


Rutherford:1903:LRP


Rutherford:1903:IER


Rutherford:1904:ZRE


Rutherford:1904:UZR


Rutherford:1904:DRA


[Rut04i] Ernest Rutherford. Succession of changes in radioactive bodies, 1904.


REFERENCES


[Rut05b] Ernest Rutherford. Der Unterschied zwischen radioaktiver und chemischer Verwandlung. (German) [The difference be-


REFERENCES


REFERENCES


Rutherford:1906:MED

Rutherford:1906:PPR

Rutherford:1906:RTa

Rutherford:1906:RTb

Rutherford:1906:RRC

Rutherford:1906:SPR

Rutherford:1906:EES
Ernest Rutherford. Über einige Eigenschaften der α-Strahlen des Radiums. (German) [On some properties of α rays of


REFERENCES


[Rut07g] Ernest Rutherford. Über Masse und Geschwindigkeit des von Radium und Aktinium ausgesandten α-Teilchens. (German)
[On the mass and velocity of α-particles emitted by radium and actinium]. *Jahrbuch der Radioaktivität und Electronik*, 4 (??):1–6, ???. 1907. CODEN JAREAS. ISSN 0368-1289.

**Rutherford:1907:VEP**


**Rutherford:1907:PORb**


**Rutherford:1907:VVE**


**Rutherford:1907:PORa**


**Rutherford:1908:CNA**

Rutherford:1908:URB


Rutherford:1908:LNT

Ernest Rutherford. Die Ladung und Natur des $\alpha$-Teilchens. (German) [the charge and nature of $\alpha$ particles]. *Jahrbuch der Radioaktivität und Electronik*, 5(?):408–423, 1908. CODEN JAREAS. ISSN 0368-1289.

Rutherford:1908:LNTb


Rutherford:1908:DEG


Rutherford:1908:NCP


Rutherford:1908:RAR

the Manchester Literary and Philosophical Society in February 1908. According to [Coh88, page 29], “the definitive paper on the Geiger counter was presented to the Royal Society on June 18, 1908 and published in [RG08a].”


Rutherford:1909:NFA


Rutherford:1909:OAS


Rutherford:1909:VAR


Rutherford:1909:VA


Rutherford:1909:VAI


Rutherford:1909:APM


[Rut10a] Ernest Rutherford. Existieren die Atome, Molekeln und Elektronen?. (German) [Do atoms, molecules and electrons exist?]. *Umschau*, 14(?):341–344, ????? 1910.

[Rut10b] Ernest Rutherford. Existieren die Atome, Molekeln und Elektronen?. (German) [Do atoms, molecules and electrons exist?]. *Umschau*, 14(?):369–372, ????? 1910.


REFERENCES


REFERENCES


[Rut11j] Professor Ernest Rutherford, F.R.S. The scattering of the α and β rays and the structure of the atom. *Proceed-
REFERENCES

Rutherford:1912:LDC
Ernest Rutherford. Lectures delivered at the celebration of the twentieth anniversary of the foundation of Clark University, September 7–11, 1909. The history of the alpha rays from radioactive substances. Clark University, Worcester, MA, USA, 1912. iv + 161 pp.

Rutherford:1912:LRS
Ernest Rutherford. Sur l’origine des rayons $\beta$ et $\gamma$ des substances radioactives. (French) [On the origin of $\beta$ and $\gamma$ rays from radioactive substances]. Radium (Paris), 9 (10):337–341, October 1912. CODEN RADMA2. ISSN 0370-3223 (print), 2437-2455 (electronic). URL http://radium.journaldephysique.org/articles/radium/abs/1912/10/radium_1912__9_10_337_0/radium_1912__9_10_337_0.html.

Rutherford:1912:ORS

Rutherford:1912:TR

Rutherford:1912:XEG
Ernest Rutherford. XCVIII. On the energy of the group of $\beta$ rays from radium. Philosophical Magazine (6), 24
REFERENCES


abs/1913Natur..92..347R; http://www.nature.com/nature/journal/v92/n2299/pdf/092347b0.pdf.


[Rut13g] Ernest Rutherford. *Radioaktive Substanzen und ihre Strahlungen*. (German) [Radioactive substances and their radiations], volume 2 of *Handbuch der Radiologie*. Akademische Verlagsgesellschaft, Leipzig, Germany, 1913. ix + 642 pp. LCCN ???.


REFERENCES


REFERENCES

[Rut14g] Sir Ernest Rutherford. XXXI. The spectrum of the penetrating \( \gamma \) rays from radium B and radium C. *Philosophical Magazine (6)* 28(164):263–273, August 1914. CODEN PHMAA4. ISSN 1941-5982 (print), 1941-5990 (electronic).

[Rut14h] Sir Ernest Rutherford. XXXIV. Spectrum of the \( \beta \) rays excited by \( \gamma \) rays. *Philosophical Magazine (6)* 28(164):281–286, August 1914. CODEN PHMAA4. ISSN 1941-5982 (print), 1941-5990 (electronic).

[Rut14i] Sir Ernest Rutherford. XXXVII. The connexion between the \( \beta \) and \( \gamma \) ray spectra. *Philosophical Magazine (6)* 28(165):305–319, September 1914. CODEN PHMAA4. ISSN 1941-5982 (print), 1941-5990 (electronic).


[Rut15a] Ernest Rutherford. Exhibition of fine crystals of autunite. *Proceedings of the Manchester Literary and Philosophical Society (Manchester Memoirs)*, 59(??):xvii, March 9,


REFERENCES


REFERENCES


REFERENCES


[Rut19g] Professor Sir Ernest Rutherford, F.R.S. LIII. Collision of $\alpha$ particles with light atoms. III. Nitrogen and oxygen atoms.


REFERENCES


[Rut21d] Ernest Rutherford. Über die Kernstruktur der Atome: Baker-Vorlesung. (German) [The nuclear structure of atoms: Baker Lecture]. S. Hirzel, Leipzig, Germany, 1921. iii + 35 + 4 pp. LCCN ???? Translation to German by Else Norst of [Rut20g].

REFERENCES


REFERENCES


Rutherford:1922:RPIa


Rutherford:1922:RPIb


Rutherford:1922:RPIc


Rutherford:1922:RPId


Rutherford:1922:RPIf


Rutherford:1922:RPIe


Rutherford:1922:EMc


Rutherford:1923:APTa

REFERENCES


REFERENCES


1923. CODEN ???? ISSN 0883-1610 (print), 2330-5908 (electronic).


[Rut24b] Ernest Rutherford. Die elektrische Struktur der Materie. (German) [The electrical structure of matter]. *Strahlentherapie*, 16(??):883–913, ???? 1924.

REFERENCES


[Rut24k] Professor Sir Ernest Rutherford, F.R.S. The natural and artificial disintegration of the elements. *The Scientific
Rutherford:1924:XCL


Rutherford:1924:NADA


Rutherford:1925:DAN


Rutherford:1925:EM


Rutherford:1925:MWX

REFERENCES


[Rut25h] Sir Ernest Rutherford. [trip report]. *Sydney Morning Herald*, ??(?) ??, 1925. Written sometime between July and December 1925, and cited in [Wil83a, page 462], as “one of the most monumentally dull pieces of writing that anyone could imagine — indeed it seems almost immature, and might have been written by a rather uninteresting child of fifteen.”.


REFERENCES


Rutherford:1926:RGAb


Rutherford:1926:RGAc


Rutherford:1926:RGAd


Rutherford:1927:RASa


Rutherford:1927:RASb


Rutherford:1927:RASc


Rutherford:1927:RASd


Rutherford:1927:APSa


Rutherford:1927:RN


**Rutherford:1927:SAI**


**Rutherford:1927:SRA**


**Rutherford:1927:SRP**


**Rutherford:1927:APSB**


**Rutherford:1927:RSE**


**Rutherford:1927:LSR**

Sir Ernest Rutherford, O.M., P.R.S. LI. Structure of the radioactive atom and origin of the α-rays. *Philosophical Magazine (7)*, 4(22):580–605, September 1927. CO-
DEN PHMAA4. ISSN 1941-5982 (print), 1941-5990 (electronic). URL http://www.tandfonline.com/doi/abs/10.1080/14786440908564361. Cited in [Wil83a, page 441] as ‘a great paper’. Wilson (page 559) later notes that this paper inspired George Gamow to his prediction of the quantum tunneling effect in 1929 (credit also goes to Edward Condon and Ronald Gurney who wrote two papers in 1928 on that idea, and to Robert Oppenheimer, who published a paper on that topic five months before those of Condon and Gurney).


REFERENCES


REFERENCES


[Rut29h] Ernest Rutherford. Penetrating radiations. The Engineer, 147(??):413, April 1929. CODEN ENGIAL. ISSN 0013-7758.


REFERENCES

URL http://adsabs.harvard.edu/abs/1929RSPSB.104..97.; http://rspb.royalsocietypublishing.org/content/104/729/97.


REFERENCES


[Rut31c] Lord Ernest Rutherford. α-Teilchen grosser Reichweite und die Entstehung der γ-Strahlen. (German) [α particles and long range origin of γ rays], volume [Jg. 82.] 1931, Fachgr. II, Nr 19, 1931 of Sonderdrucke aus den Nachrichten von der Gesellschaft der Wissenschaften zu Göttingen: Mathematisch-physikalische Klasse. Weidmann, Berlin, Germany, 1931. 248–251 pp. LCCN ????

[Rut31d] Lord Ernest Rutherford. α Teilchen grosser Reichweite und die Entstehung der γ Strahlen. (German) [Long
REFERENCES


Rutherford:1931:APSb


Rutherford:1931:HP


Rutherford:1932:APT


Rutherford:1932:EFR

[Rut32b] Ernest Rutherford. Erinnerungen an die Frühzeit der Radioaktivität. (German) [Memories of the early days of radioactivity]. Zeitschrift für Elektrochemie, 38(7 (or 8?)): 476–480, July 1932. CODEN ZEELAI. ISSN 0372-8382.

Rutherford:1932:BF

REFERENCES


REFERENCES


REFERENCES


[Rut35a] Ernest Rutherford. [letter to the editor]. *The Times [London, UK]*, ??(??):??, May 1, 1935. ISSN 0140-0460, 0956-1382. Cited in [Wil83a, page ], and on the subject of the claims against the USSR for the cost of Peter Kapitza’s laboratory
equipment that was to be shipped from Cambridge to him in the USSR, where he was being denied the right to travel abroad.

**Rutherford:1935:R**


**Rutherford:1935:RON**


**Rutherford:1935:AP**


**Rutherford:1935:NR**


**Rutherford:1935:ERP**


**Rutherford:1935:ERPa**


**Rutherford:1935:ERPb**


**Rutherford:1935:ERPc**
REFERENCES


REFERENCES


[Rut36f] Ernest Lord Rutherford. *Radioaktivität und Atomtheorie*. (German) [Radioactivity and atomic theory]. ???? ?, ????, 1936. 17 pp. LCCN ????


[Rut36k] Ernest Rutherford, President of the Academic Assistance Council. A society for the protection of science and


REFERENCES


meeting of the Indian Science Congress, and delivered by Sir James Hopwood Jeans. See also [Ano38b].


REFERENCES


[Rutxx] Ernest Rutherford. *Forty Years of Atomic Theory*. ?????, ?????, 20xx. LCCN ????


REFERENCES


Sadana:1981:TEM


Sarton:1927:MNE


Saris:1979:ACI


Satherley:2018:WSH


Semrad:1986:AMS


Selmke:2013:PRS

Markus Selmke and Frank Cichos. Photonic Rutherford scattering: a classical and quantum mechanical analogy in ray
REFERENCES


**Schlundt:1931:BRR**


**Schuster:1933:BF**


**Schrodinger:1957:STM**


**Schwarz:2013:ABM**


**Schwarz:2015:RCH**


**Shih:1991:TFI**

D.-Y. Shih, C.-A. Chang, J. Paraszczak, S. Nunes, and J. Cataldo. Thin-film interdiffusions in Cu/Pd, Cu/Pt,


REFERENCES

267


G. Scharff-Goldhaber. Marie Curie’s influence on science and on society. Web document., August 1985. URL
REFERENCES


- [She83a] William R. Shea. Introduction: From Rutherford to Hahn. In *Otto Hahn and the Rise of Nuclear Physics* [She83b],


REFERENCES


REFERENCES


C. P. Snow. The age of Rutherford: The birth of the atom. Atlantic Monthly, 102(??):76–80, November 1958. ISSN 1072-
REFERENCES


[Sod02] Frederick Soddy. An account of the researches of Professor Rutherford and his co-workers. McGill University Magazine, ??(??):??, December 1902.


is the paper, sent from the Physical Chemistry Laboratory at the University of Glasgow, that introduced the concept of nuclear isotopes. From page 400: “The same algebraic sum of the positive and negative charges in the nucleus, when the arithmetical sum is different, gives what I call ‘isotopes’ or ‘isotopic elements’, because they occupy the same place in the periodic table. They are chemically identical, and save only as regards the relatively few physical properties which depend upon atomic mass directly, physically identical also.”.


REFERENCES


REFERENCES

APPLAB. ISSN 0003-6951 (print), 1077-3118 (electronic), 1520-8842.


REFERENCES


REFERENCES


[Stahl:1965:T]


[Shao:2005:OEW]


[Tabet:1997:DTA]


[Tang:1997:DRB]


<table>
<thead>
<tr>
<th>REFERENCE</th>
<th>AUTHORS / TITLES / PUBLICATION DETAILS</th>
</tr>
</thead>
</table>


2008. CODEN ANCEAD. ISSN 0044-8249 (print), 1521-3757 (electronic).


REFERENCES

Touboltsev:2003:ELL


Thevuthasan:1999:RBC


Tammen:1995:IIS


Todd:2014:BHL


Thomson:1896:XPE


Trenn:1971:RSS

[Tre71a] Thaddeus J. Trenn. Rutherford and Soddy: From a search for radioactive constituents to the disintegration theory
REFERENCES

of radioactivity. RETE: Strukturgeschichte der Naturwissenschaften, 1(?):51–70, 1971. CODEN RETECK. ISSN 0340-4617.


REFERENCES


REFERENCES


[vdB07] Antonius van den Broek. Das α-Teilchen und das periodische System der Elemente. (German) [The α particle and the periodic system of elements]. *Annalen der
vandenBroek:1913:RPS

Antonius van den Broek. Die Radioelemente, das periodische System und die Konstitution der Atome. (German) [The radio elements, the periodic system, and the constitution of atoms]. *Physikalische Zeitschrift*, 14(1):32–41, January 1913. CODEN PHZTAO. ISSN 0369-982X. URL http://hdl.handle.net/2027/njp.32101054770894?urlappend=%3Bseq=70.

vanderKolk:1989:SPS


Villeneuve:2005:TCR


vanIJzendoorn:1989:SDP

Valdecasas:2014:WBN


Volterra:1912:LDC


Vucinich:1986:BRK


Voinov:2009:SRC


vonWeizsacker:1935:TKG


Wall:2018:SHI

REFERENCES


[Whe18] David Whetstone. LEGO man Steve Mayes has been splitting the atom for the Great Exhibition of the North: The North Shields modeller has been creating a Timeline of Northern Innovation to display in the Mining Institute. Web article., February 27, 2018. URL https://www.chroniclelive.co.uk/whats-on/arts-culture-news/lego-man-steve-mayes-been-14343862.


REFERENCES


REFERENCES


REFERENCES


REFERENCES


Ziman:1969:RMLb


Zhang:2002:DER