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Title word cross-reference

$(2s)(2p)$ [HH36a]. $2p^2$ [Ste39]. $4n$ [MM36]. 6×9 [Gel57]. $^{+}$ [Har33d, Har34b, Har35c, HH36c, HHM40b, Pra52, Wil40]. $^{++}$ [HHM40b, HHM40a]. $^{+++}$ [HHM40b]. $^{++++}$ [HHM40b]. $^{+13}$ [Fro57d]. $^{+2}$ [Har55a, Har60]. $^{+3}$ [FH57, Har35c]. $^{+4}$ [FH57]. $^{-}$ [BP54, Har33d, Har35c, HH36b]. ^{1} [HH36a]. ^{3} [HH36a]. ^{4} [MM36]. ^{5} [MM36]. ^{6} [MM36]. $_{4}$ [HdLKP34, HdLKP35]. $Ax = \lambda Bx$ [Bee78a]. β [Har23a]. $\chi(x) = \int_0^\infty \exp(-(x - w^2)^2)\, dw$ [HJ39]. $jy'' + (2/x)y' - y^2 = 0$ [Har37b]. q [CD74b]. ρ [CM52]. S [CD74a]. $\sqrt{(1/2)\pi}e^{(1/2)\pi\rho^2} \int_\rho^\infty e^{-(1/2)i\pi\lambda^2}\, d\lambda$ [CM52]. $Z = 1$ [Des73]. $Z = 120$ [Des73].

-rays [Har23a]. **-Step** [CD74a].

17 [Mil45a]. **1924** [Ano22]. **1944** [Mil45a, Mil45b]. **1955** [Mul57]. **1957** [Gel57]. **1961** [GY62]. **1971** [Phi79]. **1978** [MS78]. **1993** [BCEP94].

2004 [CK06]. **2010** [CK14]. **20th** [BW01a]. **235** [Rei74].

3-butadiene [Nes55b].

51 [RB37a].

60-Year [Rei74].

'93 [IEE93, Ano88].

A. [Har47a, Van11, WTE$^+$85]. **A.E.C.** [Rei74]. **Abiding** [Rei74]. **Above** [WTE$^+$85]. **absorption** [HdLKP34, HdLKP35]. **Accelerating** [SAY$^+$18]. **Account** [Ros63, Ros88]. **ACE** [AWL$^+$88, Har47a]. **across** [Cle53]. **Advisory** [KB58]. **Age** [Rei74, Bow96, WTE$^+$85]. **air** [Smi90]. **Aircraft** [Har25b, Van11]. **Al** [Har35c]. **Aleksandrovich** [OR06, VKL75]. **Alfred** [AB74]. **algebraic** [MS78]. **Algebraically** [CD74b]. **Algorithm** [BO98, CD74a, CD74b, Nes65, PY24, PHM16, PS21, UF89, CW81, CWL83, Dav80, HVCY21, Kal80, KBB$^+$20, MS93, Sha70]. **Algorithms** [CW85c, CW85a, Cul94a, Cul94b, Cul94c, CZ02, Cul96, CW02, MS78, MRD92]. **Alkali** [Lin24a, Lin24b]. **Alkali-metals** [Lin24a]. **Allies** [AWL$^+$88, WTE$^+$85]. **Almlöf** [LH17]. **Alphen** [Din53c]. **alternating** [CHPT39]. **Alternative** [Sma01]. **Aluminium** [Har26b]. **Aluminium-like** [Har26b]. **Amazing** [Ano48]. **America** [Mir21]. **analog** [Bow96]. **Analogue** [Sma01]. **Analyse** [Sad89]. **Analyser** [Ano35, Ano39, Har49a, MWBS38, Por36, Ano49, Cra38, Cra47, HP35, Har35b, Har36a, HP38, HN38a, HI38, Har40a, Har40b, Har46a]. **Analysers** [Hol94]. **analyseur** [HP39]. **Analysis** [BW01a, GHF57, Har52b, Har56b, Har58e, BW01b, Bus36, CW84, Har51d, Mai21, B.53, Dav59, Dwy55, Har53a, Jon53]. **Analytical** [Har49i]. **Analyzer** [Owe86, Ros37, Bun90, Bus31, HN38b, HP39, Hol96, Sha41]. **anode** [Har41a, Har42a, Har42b]. **Anti** [Har25b, Van11]. **Anti-Aircraft** [Har25b, Van11]. **Antireductionism** [Mar18]. **Antiréductionnisme** [Mar18]. **any** [Boy50, Har24a]. **Appleton** [Unz66]. **Application** [HP39, May59, Ste39, Har36a, HP38, HI38, Har42b, Har46a, Har52a, Mar17, HP39]. **Applications** [Har26a, Por36, Swi28, Har23c, Har35d, HN38a, HN38b, Har40a, Har40b]. **applied** [Har42a]. **Approach** [Fro77, FBJ97]. **Approximate** [Har34a, Har55a, Har56a, SWTM01, Har23c, HI33, Har37c, Foc30b]. **Approximation** [Gás54, LPLH63, Pra52, Löw55c]. **arbitrary** [WGG20]. **Arduous** [Rei74]. **argon** [HH38b, Har60]. **argument** [Har49g]. **arithmetic** [Har48a]. **Arnoldi** [Cul96, CZ02, PS21]. **assembly** [Tem50]. **Associated** [Ros63, Ros88, HJ48, MRD92]. **Asymptotic** [Din58a, Din58b, Din58c]. **Atom** [Bor27, Har28a, Har28b, Har28c, Har29b, Har29a, Har29d, HI33, HB33, Har29a, Fli28, Fow27a, Fow27b]. **Atomic**

[Bar60, Bla58, Cou58, DHR55, FBJ97, Gau28, Gel57, Har32, Har57b, Har58d, How59, Lin24a, Lin24b, May59, Mul57, Rei74, Rid56, RAC+29, Swi26, CGD+93, DHC+91, Fro57a, Fro58, Gra79, Har23d, Har25a, Har25e, Har33d, Har34a, Har34b, HH35a, Har35c, Har47b, Har55b, Har57a, MS36, Tru59]. **Atoms** [Fro77, Hyl63, Wil88, Des73, Har24b, Har24c, Har26b, Har36b, Har56a]. **August** [MS78]. **Auspices** [Mul57]. **Austausch** [Foc30a]. **Austrittsarbeit** [TB32]. **autobiography** [Lin85a, Lin85b, Lin85c]. **Automatic** [AWL+88, Har50a, Har52a, Jon04, May59, WWG54, BS54, Har51b]. **Automatische** [Har51b]. **Award** [Rei74].

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D [Ano46b, Ano51, Arn48, B.53, Bar60, Beu62, Bla58, Bro62, Bro47, Cer86, Chu53, Cou58, Dav59, Dwy55, Fli28, Fow27a, Fow27b, Goo51, Har51a, Har53a, How59, Jon53, K.47, L.47, Mat50, Mul57, Tru59, Ull52, Vaj51, Wil58, Mar18]. **D.** [WTE+85, Wil84]. **Darwin** [Tho63]. **David** [CK06]. **Davidson** [BO98, CPS94, Dav80, Kal80, KBB+20, LWX24, MS86, Mor90, Mor92, PY24, PHM16, Sad89, SWTM01, SBFV96, SV00, SF93, SF94, UF89]. **Davidson-Type** [BO98]. **Dawson** [Din58b]. **Dead** [Rei74]. **decades** [Mar17]. **December** [BCEP94, CK06]. **defect** [Har25e]. **defence** [Smi90]. **Defiance** [Sum14]. **deflection** [Har23a]. **degenerate** [Löw55d]. **Degrees** [WTE+85]. **d'énergie** [HP39]. **densities** [Har60]. **Density** [Löw63, Löw55b, Zan13]. **Depend** [Ano48]. **derivation** [Unz66]. **derivative** [HJ48]. **derived** [Har43a]. **Description** [Ros63, Ros88]. **determinant** [BTSB22]. **determination** [CD55, CD57, Har42b]. **determined** [Kry31]. **Developing** [SG00]. **Development** [AWL+88, Ros63, Ros88, Mai21, MS11, Owe94]. **Developments** [Ano88, AWL+88, BW01a, Cer86, Har46b, Har47h, Har84a, Har84b, L.47, WTE+85, Har47e, Har47f, Har47g, Har47d, Bro47, Mat50]. **diagnosis** [Gil51]. **Diagonalization** [LSAS01, LGGT93, Nes65]. **Diamagnetic** [Din52a]. **diamagnetism** [Din53c]. **diatomic** [JH35]. **Dictionary** [Hyr08]. **dielectric** [CHPT39]. **Dies** [Ano74, Ano93]. **Differensialanalysatoren** [Ros37]. **different** [Cle53, Har24b, Har26b]. **Differential** [Ano35, Ano39, Bun38, CN47, Har49a, Hol94, Lei54, MWBS38, Owe86, Por36, Ros37, Ano49, Bun90, Bus31, Cra38, Cra47, Har33c, HP35, Har35b, Har36a, HW37, HP38, HN38a, HN38b, Har38, HI38, HP39, Har40a, Har40b, Har46a, Har50b, Har58b, Harxxg, Lan50, Sha41]. **différentiel** [HN38b, HP39]. **difficulties** [Mar17]. **Diffraction** [JWH28, Sen52, Cle51, Har54]. **Diffusion** [AWL+88, GGG11, Har58a]. **Digital** [AWL+88, Gon24, WWG51, WWG54, CD55, CD57, Har47d, Har48b]. **Dilemma** [Löw63]. **dimension** [ZJ23]. **dimensional**

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E. [Harxxb, Smi90, WTE+85]. **Early** [Cro90, Hyl63, Med88, Owe86, Mai21]. **Earth** [Cle53, HW52]. **Eckert** [Cer86]. **ed** [AWL+88]. **Edinburgh** [Mai21]. **Edmund** [Mai21]. **Edn.** [Ano51]. **eds** [AWL+88]. **EDSAC** [BBG+50, Gil51, Whe50, WWG54]. **effect** [Din53c, HS37, MHP37]. **Effects** [KS65, Löw55a, Sla51a, Wil88, Löw55d, Pyy88]. **eigenpairs** [SF94]. **eigenproblems** [SBFV96]. **eigensolutions** [Ret82]. **Eigensolver** [AAW+17, Kny01, SAY+18]. **Eigenspace** [CD74b]. **Eigenvalue** [Arb16, Bee78a, Bee78c, CW85c, CW85a, Cul94a, Cul94b, Cul94c, Saa11, Sha78, SV00, SF93, UF89, Arn51, CW85b, Cul96, CW02, Lan50, Mor90, MS93, SSL02, ZJ23]. **Eigenvalues** [Bee78b, BO98, CD74b, Dav93, LWX24, CW81, Dav75, HVCY21, Liu78, MS86, Mor92, MRD92, Sha70, SBPH73]. **Eigenvector** [PS21]. **Eigenvectors** [Bee78b, Dav78, Dav93, Fel74, Dav75, HVCY21, Liu78, MRD92, Sha70, SBPH73]. **eight** [BP54]. **Einstein** [Din58c]. **elaboration** [Mar17]. **electric** [NHP36]. **Electrical** [Ano39, HN38a, HN38b, Har43b]. **electricity** [Har29a]. **electromagnetic** [Har23b, Har29c, Har31b]. **Electron** [Hyl63, Ste39, Wil53, DHC+91, Dir29, Fro57c, Har24b, Har42b, Ste37]. **Electronic** [AFS82, Ano46b, Boy50, BP54, BS54, Sma01, WWG51, WWG54, BTSB22, Har26b, Har46c, Har46d, Har50c, Har48c, Nes55b]. **Electrons** [Har31c, CGD+93, Din52c, Din52b, Din53a, Din53b, Har29b, Swi36, TB32]. **électrotechnique** [HN38b]. **Elektrizitätsverteilung** [Har29a]. **Elektronen** [TB32]. **element** [Har24a]. **elementary** [cHC48]. **Elements** [KW03]. **Ellipse** [Har37a]. **Elliptic** [Har49e, LWX24]. **emission** [Har42b]. **End** [Fro00]. **Enduring** [Lon16]. **Energies** [Ste39, CGD+93, DHC+91, MM36]. **Energy** [BR37, Ing31, Pra52, WP57, JH35, JWH28, Tha39]. **Eng** [Ano51]. **Engine** [Har49i]. **Engineering** [Ano39, HN38a, HN38b]. **ENIAC** [Ano46b, Har46c, Har46d, Har48c]. **Enigma** [AWL+88, WTE+85]. **enthusiasm** [Bow96]. **Entwicklung** [MS11]. **Equation** [Bun40, Har49f, Lei54, Sla51a, Har37c, Har37b, Har58a, Kry31, Luz31, Unz66, Luz31]. **Equations** [Ano34, Bun38, Coo48, CN47, Har49e, KS65, Pra52, Bus31,

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F [Har35c]. **F.R.S.** [Ano52, Wil58]. **factor** [Har25a]. **Factorization** [JOK13]. **factors** [Din58a, Din58b, Din58c]. **Falkner** [Har37c]. **Fall** [Mir21, WTE+85]. **FCI** [OJS90]. **Fe** [Fro57d, WP57]. **February** [CK06]. **Feler** [Bee78b]. **Fermi** [Din58c]. **Festkolloquium** [GGG11]. **few** [Dav75, MRD92, SF94]. **Field** [Fro57b, Har28a, LBV20, Sla72, Wil37, Wil40, Wil53, CHPT39, Foc30a, Fro57c, Fro57d, Har23a, Har28b, Har28c, Har29d, Har31b, Har34a, HH35b, HH36a, HH36b, HH36c, HH38a, HH38b, HHS39, HHM40b, HHM40a, HHM41, HH48, HW52, Juc39, May57, Ste37, Swi35, Swi36]. **Fields** [Bun90, Gau28, Din53a, Din53b, Gra61, Har33d]. **film** [CM49]. **Finding** [Bee78b, SF94]. **fine** [Cor33, HdLKP34, HdLKP35]. **Finite** [LBV20]. **first** [Fro57d, Har50b, Har56a]. **first-order** [Har50b]. **Fischer** [Cro05, Hib19, Joh12, Roo94]. **Fischer-Hjalmars** [Joh12, Roo94]. **Fisher** [Fli28, Fow27a, Fow27b]. **Five** [Jon04, Rei74]. **flat** [Cle53]. **Flow** [Cor33, Har49f, Har53b, Lom60, CH48a, CH48b, EHI+46, JSW+44]. **Fluid** [Lei54]. **Fluide** [GGG11]. **Fluids** [Ros63, Ros88]. **fly** [RBM+23]. **Fock** [LPLH63, BTSB22, Des73, Fro77, Gás54, Har58c, Löw55a, Löw55c, Löw55d, Löw58, Löw60, Löw63, Mar16, Mar17, Mar18, OR06, Pra52, Sla51a, Sla51b, VKL75, WGG20, WP57]. **Fockschen** [Gás54]. **Fok** [Ano74]. **forefathers** [Zan13]. **Foreword** [Har51c]. **Forgotten** [Mir21]. **formula** [Har33b]. **Found** [Pra52, WP57]. **Four** [Bun38]. **Fourth** [Har43b]. **Fowler** [Mil45b, Mil44, Mil45a]. **fraktionaler** [GGG11]. **Framework** [SG00]. **Francis** [Cou73]. **Free** [Har31c]. **French** [HN38b, HP39, Luz31, Mar18]. **frequencies** [Kry31]. **Frequency** [Coo48]. **Fresnel** [Din58b]. **Fritz** [Harxxc]. **Froese** [Cro05, Hib19]. **full** [OJS90]. **Function** [Löw60, Gás54, HI33, Har35d, HJ39, HJ48, TB32]. **functional** [Zan13]. **Functions** [Har58d, Lew39, Pra52, Ste39, WP57, Boy50, BP54, BS54, Din58c, DHR55, Fro57a, FH57, Fro58, Har33d, Har34a, Har34b, HH35a, Har35c, HH38c, Har49g, Har55a, Har55b, Har56a, Har57a, Tha39]. **Fund**

[Mul57]. **Fundamental** [Rei05, RW15]. **Fundamentals** [Bro62, Nic62, Ahl63, Beu62, Phi63]. **Further** [Har29d].

G [Beu62, Bro62]. **Ga** [HHM40b]. **Galton** [Tho63]. **gamma** [HJ48, Din58c]. **Gamow** [Har32]. **Gardner** [AWL+88]. **gas** [JH35]. **Ge** [HdLKP35, HdLKP34, HHM40a]. **Gebeleins** [GGG11]. **GeCL** [HdLKP35, HdLKP34]. **general** [Boy50, BS54, Din52c, Din58a]. **Generalization** [CD74a, Ste37]. **Generalizations** [Löw58, MS86, Mor92]. **Generalized** [Bee78a, Bee78c, CKW89, KBB+20, Mor90, SBFV96]. **George** [Har32]. **German** [AWL+88, WTE+85, Foc30b, Foc30a, Gás54, Har29a, Har51b, MS11, TB32, Uns26]. **giant** [Har46e]. **Given** [Mul57]. **gold** [DHR55]. **Gradient** [Kny01, CW80]. **gradually** [Har42a]. **gradually-applied** [Har42a]. **great** [Har40b, SG00]. **greedy** [HVCY21]. **Ground** [CGD+93, DHC+91, Fro57d]. **Ground-state** [CGD+93, DHC+91]. **Group** [Tin64]. **Guide** [WWG54]. **gunnery** [Van11, Har25b].

Haas [Din53c]. **Hackers** [WTE+85]. **Hartree** [Ano51, Ano52, Ano88, Beu62, Bro62, Cro05, Gás54, Gel57, Hil43, LPLH63, RB37a, WTE+85, Wil58, WP57, All50, Ano46a, Ano46b, Arn48, AWL+88, B.53, Bar60, BTSB22, BR37, Bla58, Bro47, Bun90, Cer86, Chu53, Cou58, Cro08, Dar58, DA04, Dav59, Dwy55, Fli28, Fow27a, Fow27b, Fro77, Fro03, Gás54, Gau28, GS11a, Gon24, Goo51, Har51a, Har53a, Harxxa, Harxxf, Harxxd, Harxxe, Harxxc, Harxxb, Hol94, How59, Jon53, K.47, L.47, Lew39, Löw55a, Löw55c, Löw55d, Löw58, Löw60, Löw63, Mar16, Mar17, Mat50, Med88, Mul57, Pra52, RB37b, SLT+10, SLG+10, Sla30, Sla51a, Sla51b, Ste39, Swi87, Tru59, Ull52, Unz66, Vaj51, WGG20, Wil84, Zan13]. **Harvard** [AWL+88]. **Haverford** [Mul57]. **Having** [Bun38]. **head** [BFH20]. **Heat** [CN47, EHI+46, JSW+44]. **Heat-Conduction** [CN47]. **Heavy** [KW03]. **Helium** [Lew39, CM49, Gau29, HI33, Tem49]. **Her** [Hib19]. **Herbert** [GY62]. **Hg** [HH35a]. **High** [AAW+17, BFH20, CD55, CD57]. **high-speed** [CD55, CD57]. **highest** [SBPH73]. **Hill** [Van11]. **Historical** [BW01a, Har48b]. **History** [AWL+88, GS11b, KHFA67, Nas90, Wil97, Sha98]. **Hjalmars** [Joh12, Roo94]. **Howard** [Mil44, Mil45a, Mil45b]. **Humanist** [Joh12]. **Hume** [Harxxe]. **Hume-Rothery** [Harxxe]. **Humphrey** [KB58]. **hydrogen** [CF49]. **Hypergrowth** [WTE+85].

I/O [SSL02]. **II** [FH26, CM49, CD57, Cul94b, Din52d, Din58b, Dir03, Dom49a, Fro58, Har26b, Har28b, Har34b, HH36a, HPCS37, Har56b, Lin85b, Löw55c, Löw63]. **III** [Din52a, Din58c, Har28c, HH35a, Harxxg, Lin85c, Löw55d, Löw63, MM36, Ste39]. **im** [Har29a]. **Impact** [Ano88, AWL+88, Cer86, Har46b, Har47h, Har84a, Har84b, Hib19, L.47, WTE+85]. **implementation** [CW81]. **Improve** [PS21]. **Improved** [MRD92, Ste39]. **impulse** [NHP36]. **Inaugural**

[Har47h]. **Include** [Löw55a, Löw55d]. **Including** [KS65, HHS39]. **Incompressible** [Ros63, Ros88, Ste49]. **independence** [KBB+20]. **industry** [Har40b, WTE+85]. **infinite** [Sen52]. **influence** [Din52d]. **Information** [WTE+85]. **Inga** [Joh12, Roo94]. **initial** [Whe50]. **Inmos** [AWL+88]. **Innovation** [AWL+88]. **innovator** [SL11]. **instability** [Har43a]. **Institute** [Ano22]. **Instrumental** [Bus36]. **Instruments** [All50, Ano51, Ano88, AWL+88, Cer86, Chu53, Goo51, Har51a, Har49h, Har50d, Har53c, Har84a, Har84b, Har12, Ull52, Vaj51, WTE+85, Wil84]. **integral** [Har39, Har54, Lan50]. **integrals** [Din58b, Din58c, Har35d]. **Integration** [Har49c, Har38, Har43b, Har50b, Har58a]. **Intellectual** [Lin85a, Lin85b, Lin85c]. **intensities** [Har28c]. **intensity** [Har25a, WH29]. **Interaction** [AAW+17, LSAS01, HS37, Löw55b, MM36, Nes55a, OJS90, SAY+18, Sha98, SSL02, Swi36]. **internalist** [Mar18]. **internaliste** [Mar18]. **International** [BCEP94]. **interpolation** [Har55b]. **interpretation** [CW80, FH26]. **interpretations** [Löw55b]. **Interview** [Ano46a]. **Introduction** [DF07, Har56b, Harxxg, Harxxh, Roo94, WWG54, Wil84, Din52c]. **Invention** [Pri10]. **Inventory** [KHFA67]. **investigation** [HB33, JWH28, Sco45]. **ionisation** [Har24a, Har25d, HB33]. **ionised** [FH26, Har25d, Har33b]. **Ionized** [Bun59]. **ionosphere** [HW52]. **ions** [CGD+93, DHC+91, HH38c, MS36]. **Iteration** [SV00, Arn51, Lan50]. **iterative** [Dav75, Har49d, Liu78, Ret82, SAY+18, Sha70, SBPH73]. **itinéraire** [Mar18]. **itinerary** [Mar18]. **IV** [Din52b, Gau29, Har29d, Har35c, HHM41].

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K-absorption [HdLKP35, HdLKP34]. **Kalamboukis** [Dav80]. **Kelvin** [Har43b]. **Kinetic** [BR37]. **Kinetics** [Klu53]. **Kohn** [BTSB22]. **Korteweg** [GGG11]. **Kozaczuk** [WTE+85, AWL+88]. **Krylov** [Luz31]. **Kvantovaya** [Dir03].

Laboratory [AWL+88, Mai21]. **Labs** [WTE+85]. **Lady** [Gon24, Wal00]. **lag** [CHP36, HPCS37]. **Laminar** [Har49e, Har49f, Ros63, Ros88, CH48a, CH48b]. **L'analyseur** [HN38b]. **Lanczos** [BCEP94, CD74a, CD74b, CW80, CW81, CWL83, CW84, CW85c, CW85a, CW85b, CKW89, Cul94a, Cul94b, Cul94c, Cul96, CW02, CZ02, MS93, ZJ23]. **Landau** [Din53c]. **Large** [Arb16, AWL+88, CD74b, CW85c, CW85a, Cul94a, Cul94b, Cul94c, Dav78, Fel74, Nes65, Saa11, SF93, UF89, CW81, CWL83, CW84, CW85b, CW02, Dav75, Din52c, Din52d, Fro57a, Fro58, Har47d, Har49g, JOK13, Liu78,

Mor92, MRD92, RBM+23, Ret82, Sha70, SBPH73, SSL02, SF94, ZJ23]. **large-dimension** [ZJ23]. **Large-Scale** [AWL+88, JOK13, SSL02]. **Largest** [CD74b]. **Lattice** [JWH28]. **Lawrence** [Phi79, Jam58]. **Layer** [Har49e, CH48a, CH48b, Cra38, Har37c, Har49f]. **Layers** [Ros63, Ros88, Ste49]. **Lecture** [Arb16, Har47h, Har43b]. **Lectures** [Mul57, Har47a]. **Legacy** [Lon16]. **Letter** [Jam58]. **letters** [Smi90]. **Level** [LWX24]. **Levels** [Pra52, WP57]. **Levy** [WTE+85]. **Li** [MM36]. **Libkrylov** [RBM+23]. **Library** [BBG+50, RBM+23]. **Life** [Cro05, Fro03]. **light** [MM36]. **ligne** [HP39]. **like** [Har24b, Har24c, Har26b]. **limit** [OJS90]. **limitation** [Har41b]. **limiting** [Fro57a, Fro58]. **Lindsay** [Lin85a, Lin85b, Lin85c]. **line** [HP38, HP39]. **Linear** [Bun38, SV00, Har58a, Lan50, NHP36]. **liquid** [CM49, Tem49]. **Literature** [AWL+88]. **lithium** [Har24c, Har24b]. **lithium-like** [Har24c, Har24b]. **Liu** [PHM16]. **localized** [HVCY21]. **Locally** [Kny01]. **logarithmic** [HJ48]. **Logic** [Pri10]. **London** [Harxxc]. **long** [Har56a, HW52]. **Lösung** [Foc30b]. **Lovelace** [Gon24]. **low** [HS37]. **lowest** [Dav75, Liu78, MRD92, SBPH73]. **lowest-lying** [Liu78]. **lying** [Liu78].

M [Ahl63, AWL+88, Beu62, Bro62, Fli28, Har47a, Phi63]. **M.A** [Ano52]. **Machine** [Ano34, AWL+88, WTE+85, WWG54, Bus31, Har40b, Har46c, Har46d, Har46e, Har48c, Ano46b]. **Machinery** [AWL+88]. **Machines** [Ano48, Ano51, Ano88, AWL+88, Bro47, Cer86, Har46b, Har47c, Har47h, Har49h, Har50d, Har53c, Har84a, Har84b, Har12, Jon04, L.47, Mat50, Pri10, WTE+85, Bun90, Har47e, Har47f, Har47g, Har47d, HNW+48, Har48b, Har49b, Har50a, Har52a, AWL+88, Ull52, WTE+85, Wil84, All50, Arn48, Cer86, Chu53, Goo51, Har51a, K.47, Vaj51]. **Magnetic** [Din52e, RB37a, RB37b, Sla51a, Din52c, Din52d, Din52a, Din52b, Din53a, Din53b, Din53c, Har23a, Har31b, HW52, Din53a, Din53b]. **magnetron** [Har41a, Har41b, Har42b]. **magnetrons** [Har42a, Har43a]. **Making** [CNT92, CMH+13]. **Man** [Ano48]. **Management** [Owe94]. **Manchester** [Ano35]. **manganese** [Har25d]. **Manual** [AWL+88]. **many** [Dir29, Foc30b, Har29b, JOK13, Löw55b, Löw55c, Löw55d]. **many-body** [Foc30b, JOK13]. **many-particle** [Löw55b, Löw55c, Löw55d]. **March** [Phi79]. **Marshaled** [Rei74]. **Masani** [AWL+88]. **Massachusetts** [Ano22]. **material** [Kry31]. **Mathematical** [Ano88, AWL+88, Cer86, Har46b, Har47h, Har84a, Har84b, JS46, JS56, JS99, KB58, L.47, Mai21, Sha41, SG00, WTE+85, Harxxa, Harxxf, Harxxd, Harxxe, Harxxc, Harxxb, Bro62]. **mathematician** [DA04]. **Mathematics** [Ahl63, Beu62, Bro62, Nic62, Phi63, Leh66]. **Matrices** [CD74b, Dav78, Dav93, Fel74, LSAS01, Nes65, CW81, CWL83, CW84, Dav75, Liu78, Löw55b, MS86, Mor92, MRD92, Ret82, Sha70, SBPH73]. **Matrix** [Cul94a, Cul94b, Cul94c, Löw63, Sha78, SWTM01, Arn51, Cul96, Dav89, HVCY21, RBM+23, SF94]. **matters** [Kry31]. **Maurice** [CK14]. **Maverick** [AWL+88]. **Max** [Fow27a, Fow27b]. **Maxwell** [Lon16]. **May** [Har13]. **MCHF** [FBJ97]. **McLean** [AWL+88]. **Meaning** [Gon24]. **means** [Löw55b].

Meccano [Ano49]. **Mechanical** [Har43b, Hol94, Foc30b, HW37, Har38]. **Mechanics** [Bor27, Fli28, Fow27a, Fow27b, Har28a, Har31c, Har33a, Harxxh, HSxx, Harxxi, Harxxj, Harxxk, Harxxl, Harxxm, Harxxn, Harxxo, Harxxp, Harxxq, Hyl63, Med88, Swi28, Tin64, Dir29, Har28b, Har28c, Har29d, Har35a, Tem49, Tem50]. **Mechanized** [Leh66]. **Media** [Bun59, Cle53]. **medium** [Har29c, Har31a, Har31b, Har33b]. **Mehrkörperproblems** [Foc30b]. **member** [KB58]. **Members** [Ano52]. **Memoirs** [Wil85]. **Memories** [WTE+85]. **Mentor** [SL11]. **mercury** [Har34a, May57]. **Mesh** [KBB+20]. **Metallen** [TB32]. **metallic** [Sen52]. **Metals** [Din52e, Lin24b, Din52c, Din52d, Din52a, Din52b, Din53a, Din53b, Din53c, Lin24a, TB32]. **Method** [Bee78b, CN47, Fro77, JWH28, Kny01, LWX24, Löw55a, SWTM01, Sla30, Sla51b, SV00, SF93, Ste39, WP57, Boy50, Cle51, CPS94, Foc30b, Har33c, HW37, Har42b, Har50b, Har58a, Lan50, Liu78, Löw55b, Luz31, Mar16, Mar17, MS86, Mor90, Mor92, Ret82, Swi36]. **méthode** [Luz31, Sad89]. **Methoden** [MS11]. **Methods** [BI10, Bro62, Cer86, Coo48, Dav78, Har28a, Har53b, JS46, JS56, JS99, LSAS01, LGGT93, Saa11, Wil88, Dav89, Har24a, HMN47, MS11, MS78, SBFV96]. **Microelectronics** [AWL+88]. **Milan** [MS14]. **Milestones** [CNT92, CMH+13]. **Milne** [Smi90]. **Mind** [AWL+88]. **minimized** [Arn51]. **Minister** [Rei74]. **Mirrors** [Van11]. **mistakes** [Gil51]. **Mn** [Har55a]. **mobiles** [HP39]. **modal** [CW84]. **Model** [BR37, RB37a, RB37b, Dom49a, HP35]. **Models** [Lin24a, Lin24b]. **Modern** [Cal12, CNT92, CMH+13, Har49b, Mar18]. **moderne** [Mar18]. **Modification** [Sha70, SWTM01]. **modular** [RBM+23]. **Molecular** [Rei05, RW15, Boy50, CF49]. **molecule** [CF49]. **Molecules** [Wil88, JH35]. **Moments** [RB37a, RB37b]. **Monograph** [Har49a]. **Monographs** [GHF57]. **Monster** [Dav93]. **Most** [Ano48]. **motion** [Cor33]. **moving** [BFH20, HP39]. **Mr.** [Hil43, Luz31]. **Multiconfigurational** [RLM+16]. **Multiple** [LWX24]. **Multitasking** [UF89]. **Museum** [WTE+85].

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[GGG11] Hans Gebelein, Rudolf Gorenflo, and Rudolf Gorenflo. *Festkolloquium "Rudolf Gorenflo: Fluide aus fraktionaler Sicht", Hans Gebeleins Turbulenz aus stochastischer Sicht, Wellen von Korteweg und de Vries, zelluläre Diffusion u.a*, volume 19.2011 of *Forum der Berliner Mathematischen Gesellschaft*. Berliner Mathematischen Gesellschaft, Berlin, Germany, 2011. ISBN 3-940170-19-4. 207 pp. LCCN ???? URL `https://www.math.berlin/publikationen/forumbaende.html`.

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Hartree:1924:SME

[Har24a] D. R. Hartree. Some methods of estimating the successive ionisation potentials of any element. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 22(3):464–474, September 20, 1924. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1924PCPS...22..464H`.

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Hartree:1925:IPI

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Hartree:1928:WMAa

[Har28a] D. R. Hartree. The wave mechanics of an atom with a non-Coulomb central field. Part I. Theory and methods. *Mathematical proceedings of the Cambridge Philosophical Society*, 24(1):89–110, January 1928. CODEN PCPSA4. ISSN 0008-1981. URL https://ui.adsabs.harvard.edu/abs/1928PCPS...24..426H. Page 91 of this paper introduces atomic units for *length* ($a_H = h^2/(4\pi^2 me^2)$, the radius of first Bohr orbit of hydrogen), *charge* (e, the electron charge), and *mass* (m, electron mass). From these are derived the *unit of action* ($h/(2\pi)$), the *unit of energy* (e^2/a, twice the ionization energy of hydrogen), and the *unit of time* ($1/(4\pi cR)$). The value R is the Rydberg constant. Atomic units have since been in

wide use in quantum science, to avoid dependence of calculations on physical constants whose accuracy improves over time, but some are still known only to a few decimal digits.

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trum. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 25(3):310–314, July 1929. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1929PCPS...25..310H`.

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[Har31b] D. R. Hartree. The propagation of electromagnetic waves in a refracting medium in a magnetic field. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 27(1): 143–162, January 1931. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1931PCPS...27..143H`.

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[Har33a] D. R. Hartree. Mechanics. UK National Archives papers, 1932–1933. URL `https://discovery.nationalarchives.gov.uk/details/r/ed992106-f3e4-4699-a800-46303e2fd2d9`. Reference CSAC 45.9.76/1: Book on Dynamics: Correspondence with S. C. Roberts (Secretary to Syndics, C.U.P.) and with Dr. Swirles; Hartree's outline sketches for chapter contents 1–19.

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[Har33d] D. R. Hartree. Results of calculations of atomic wave functions. I. — Survey, and self-consistent fields for Cl^- and Cu^+. *Proceedings of the Royal Society of London. Series A, Containing Papers of a Mathematical and Physical Character*, 141(844):282–301, August 1, 1933. ISSN 0950-1207 (print), 2053-9150 (electronic). URL https://ui.adsabs.harvard.edu/abs/1933RSPSA.141..282H.

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Hartree:1934:RCA

[Har34b] D. R. Hartree. Results of calculations of atomic wave functions. II. — results for K^+ and Cs^+. *Proceedings of the Royal Society of London. Series A, Containing Papers of a Mathematical and Physical Character*, 143(850):506–517, February 1, 1934. ISSN 0950-1207 (print), 2053-9150 (electronic). URL https://ui.adsabs.harvard.edu/abs/1934RSPSA.143..506H.

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[Har35a] D. R. Hartree. The bearing of statistical and quantum mechanics on school work. *Mathematical Gazette*, 22(233):73–78, May 1935. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic). URL https://www.jstor.org/stable/3608018.

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[Har35b] D. R. Hartree. The differential analyser. *Nature*, 135(3423):940–943, June 8, 1935. CODEN NATUAS. ISSN 0028-0836 (print),

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Hartree:1935:RCAb

[Har35c] D. R. Hartree. Results of calculations of atomic wave functions. IV. — Results for F^-, Al^{+3}, and Rb^+. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 151(872): 96–105, August 1935. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1935RSPSA.149..210H`.

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[Har35d] D. R. Hartree. Some properties and applications of the repeated integrals of the error function. *Memoirs and Proceedings of the Manchester Literary and Philosophical Society (Manchester Memoirs)*, 80(??):85–102, ???? ??, 1935. CODEN MPMLAQ. ISSN 0076-3721.

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[Har37a] D. R. Hartree. Calculations on Schubaurer's ellipse. University of Cambridge Library catalog: Four folders of handwritten calculations, c. 1930s: Schubaurer's Ellipse — 0.2 to 0.4, 0.4 to 1.0, 1.0 to 1.8, and 1.8 to 2.0. Loose items: a letter from L. J. Comrie to Hartree, 17 September 1937, discussing a calculation; a letter from Bertha Jeffreys, Lady Jeffreys, to A. E. B. Owen, 5 December 1986, forwarding a letter from Prof. L. Howarth of Bristol, confirming that the papers were likely to be those of Hartree, and citing his publications on these experiments., 1937.

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[Har37b] D. R. Hartree. Note on a set of solutions of the equation $jy'' + (2/x)y' - y^2 = 0$. *Memoirs and Proceedings of the Manchester Literary and Philosophical Society (Manchester Memoirs)*, 81(??): 19–27, ???? ??, 1937. CODEN MPMLAQ. ISSN 0076-3721.

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[Har37c] D. R. Hartree. On an equation occurring in Falkner and Skan's approximate treatment of the equations of the boundary layer. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 33(2):223–239, April 1937. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1937PCPS...33..223H`.

Hartree:1938:MID

[Har38] D. R. Hartree. The mechanical integration of differential equations. *Mathematical Gazette*, 22(251):342–364, October 1938. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic). URL `https://www.jstor.org/stable/3607893`. Hartree describes his Meccano model of a differential analyzer in this paper.

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[Har39] D. R. Hartree. Note on an integral occurring in the cascade theory of cosmic ray showers. *Memoirs and Proceedings of the Manchester Literary and Philosophical Society (Manchester Memoirs)*, 83(??): 175–182, ???? ??, 1939. CODEN MPMLAQ. ISSN 0076-3721.

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[Har40a] D. R. Hartree. The Bush differential analyser and its applications. *Nature*, 146(3697):319–323, September 7, 1940. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1940Natur.146..319H`.

Hartree:1940:GCM

[Har40b] D. R. Hartree. A great calculating machine: the Bush differential analyser and its applications in science and industry. *Proceedings of the Royal Institution of Great Britain*, 31(??):151–194, ???? ??, 1940. CODEN PIGBAI. ISSN 0035-8959. Presented at the Weekly Evening Meeting Royal Institution of Great Britain. Friday, May 17, 1940.

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[Har41a] D. R. Hartree. On the non-existence of a steady state in a single-anode cylindrical magnetron under certain conditions'. C.V.D.Report Mag. 6, ????, ????, September 1941. URL `https://discovery.nationalarchives.gov.uk/details/r/28633967-3e15-4623-99d1-8247cb198674`. Reference CSAC 68/6/79/D.9.

Hartree:1941:SSC

[Har41b] D. R. Hartree. The steady state of a cylindrical magnetron under conditions of space-charge limitation. C. V. D. Report Mag. 1, ????, ????, April 22, 1941. URL `https://discovery.nationalarchives.gov.uk/details/r/5ee0db12-89f3-4c8a-bb3d-a7b7b38431ec`. Reference: CSAC 68/6/79/D.5.

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[Har42a] D. R. Hartree. The calculation of the transient behaviour of single-anode cylindrical magnetrons under gradually-applied anode potentials'. C. V. D. Report Mag. 23, ????, ????, November 1942. URL `https://discovery.nationalarchives.gov.uk/details/r/97e40eb7-76b7-44fa-89ed-f892f90465c9`. Reference CSAC 68/6/79/D.14.

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[Har42b] D. R. Hartree. A method of plotting results of calculations of electron orbits in a magnetron, and its application to the determination of the emission, anode current, and charge and potential distribution. C. V. D. Report Mag. 18, ????, ????, July 1942. URL `https://discovery.nationalarchives.gov.uk/details/r/9b5ed595-cbd1-41f3-8074-e8a4cb0cab9c`. Reference: CSAC 68/6/79/D.13.

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[Har43a] D. R. Hartree. Preliminary report on operating conditions for unstrapped magnetrons derived from a criterion for the instability of the single stream steady state. C. V. D. Report Mag. 31, ????, ????, May 1943. URL `https://discovery.nationalarchives.gov.uk/details/r/43d39303-3814-423f-a720-e7ef7c7f73fc`. Reference CSAC 68/6/79/D.18.

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[Har43b] D. R. Hartree. The Thirth-Fourth Kelvin Lecture: Mechanical integration in electrical problems. *Journal of the Insti-*

tution of Electrical Engineers, 90(34):435–442, October 1943. CODEN IEJGAB. ISSN 0367-7559 (print), 2054-0582 (electronic). URL `https://digital-library.theiet.org/content/journals/10.1049/ji-1.1943.0082`. Kelvin lecture to the Institution of Electrical Engineers.

Hartree:1946:ADA

[Har46a] D. R. Hartree. The application of the differential analyser to the evaluation of solutions of partial differential equations. In *Proceedings of the First Canadian Mathematics Congress, Montreal, 1945*, pages 327–337. University of Toronto Press, Toronto, ON, Canada, 1946.

Hartree:1946:CMR

[Har46b] D. R. Hartree. *Calculating Machines. Recent and Prospective Developments and Their Impact on Mathematical Physics*. Cambridge University Press, Cambridge, UK, 1946. 40 + 2 pp.

Hartree:1946:EECa

[Har46c] D. R. Hartree. The ENIAC, an electronic calculating machine. *Nature*, 157(3990):527, April 20, 1946. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1946Natur.157..527H; https://www.nature.com/articles/157527a0`.

Hartree:1946:EECb

[Har46d] D. R. Hartree. The ENIAC, an electronic computing machine. *Nature*, 158(4015):500–506, October 12, 1946. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1946Natur.158..500H`.

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[Har46e] D. R. Hartree. The new giant calculating machine. *Listener*, ?? (??):932–??, ???? 1946.

Hartree:1947:MTL

[Har47a] D. R. Hartree. A. M. Turing's lectures on ACE. World-Wide Web document, 1947. URL `http://turing.ecs.soton.ac.uk/browse.php/B/2`.

Hartree:1947:CAS

[Har47b] D. R. Hartree. The calculation of atomic structures. *Reports on Progress in Physics*, 11(1):113–143, January 1947. CODEN RP-

PHAG. ISSN 0034-4885 (print), 1361-6633 (electronic). Appendix on page 143 has corrections and editions to [Swi35].

Hartree:1947:CCM

[Har47c] D. R. Hartree. Copy of calculating machines. UK National Archives papers, 1947. URL `https://discovery.nationalarchives.gov.uk/details/r/170047ef-454d-41e8-bb56-36ac967c4281`. Hartree's Inaugural address as Plummer Professor of Mathematical Physics, Cambridge. Reference CSAC 45.9.76/14.

Hartree:1947:RPD

[Har47d] D. R. Hartree. Recent and prospective developments in large digital calculating machines. *Journal of the Royal Naval Scientific Service*, ??(??):??, July ??, 1947.

Hartree:1947:RDCa

[Har47e] D. R. Hartree. Recent developments in calculating machines. *Journal of Scientific Instruments*, 24(7):172–176, July 1947. CODEN JSINAY. ISSN 0368-4253, 0950-7671. URL `https://ui.adsabs.harvard.edu/abs/1947JScI...24..172H`.

Hartree:1947:RDCb

[Har47f] D. R. Hartree. Recent developments in calculating machines. *Handel, v.h. XXXe Nederlandisch Natur–en Geneeskundig Congres, Delft*, ??(??):??, ???? ??, 1947.

Hartree:1947:RDCc

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176 pp. LCCN QC174.1 .S66. URL http://www.amphilsoc.org/guides/ahqp/; http://www.amphilsoc.org/guides/ahqp/s-t.htm#schrodinger. Short section only:
HARTREE, D. R. b. 1897, Cambridge, England; d. 1958, Cambridge, England.
1916, U. Cambridge.
1916–19, Military Service.
1919–29, U. Cambridge: 1924–29, Research Fellow; 1926, Ph.D. with R. H. Fowler; 1928–29, Demonstrator.
1928–29, U. Copenhagen.
1929–46, U. Manchester, Prof.
Interviews
One unrecorded interview with Elaine Hartree, D. R. Hartree's widow. 3 pp. notes.
Letters to
GOUDSMIT: 5 Mar 24 (60,2).
LINDSAY: 20 Oct 35, 3 letters 1936–39, (66,4).
Unpublished material held elsewhere
BOHR COLLECTION, Copenhagen, Denmark. Letters to Bohr, 21 Mar 28, 3 Apr 28, 29 Jun 28, 21 Dec 28, 24 Mar 29, 2 Apr 30, 26 May 30, 10 Jul 30, 10 Sep 33, 9 Mar 47. See: Bohr.
DUKE UNIVERSITY ARCHIVES, Durham, N.C. Letters to London, 11 Jul 28, 7 Aug 28, 16 Sep 28, 4 letters 1934–36. See: London.
Other information
According to Mrs. Hartree, it is unlikely that any extensive collection of her husband's papers exists; he was not in the habit of saving his correspondence.

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[Klu53] Aaron Klug. *The Kinetics of Phase Changes in Solids*. Ph.D. thesis, University of Cambridge, Trinity College, Cambridge, UK, March 21, 1953. URL https://en.wikipedia.org/wiki/Aaron_Klug; https://www.nobelprize.org/prizes/chemistry/1982/summary/; https://www.proquest.com/pqdtglobal/docview/301283484.

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[LH17] Hans P. Lüthi and Trygve Helgaker. A tribute to Jan Erik Almlöf. *Molecular Physics*, 115(17–18):2033–2042, June 2017. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

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[Lin24c] Robert Bruce Lindsay. [unknown]. *Publications of the Massachusetts Institute of Technology*, II(??):20–??, 1924. URL `https://en.wikipedia.org/wiki/Robert_Bruce_Lindsay`. Possibly republished in [Ano22].

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[Lin85a] Robert Bruce Lindsay. Intellectual autobiography of R. B. Lindsay: Part I. Niels Bohr Library Archive manuscript, 1985. URL `https://repository.aip.org/islandora/object/nbla:283933`.

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[LM03] Roland Lindh and Per Åke Malmqvist. Björn's top ten. *Theoretical Chemistry Accounts*, 110(3):115–117, October 2003. CODEN TCACFW. ISSN 1432-881X (print), 1432-2234 (electronic). URL `https://link.springer.com/article/10.1007/s00214-003-0506-7`.

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[Lon16] Malcolm Longair. *Maxwell's Enduring Legacy*. Cambridge University Press, Cambridge, UK, 2016. ISBN 1-107-08369-9. xxi + 664 pp. LCCN ???? URL `http://www.cambridge.org/us/academic/subjects/physics/general-and-classical-physics/maxwells-enduring-legacy-scientific-history-cavendish-laboratory`.

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[Löw55a] Per-Olov Löwdin. An extension of the Hartree–Fock method to include correlation effects. In *Les Electrons dans les Métaux. Dixième Conference Solvay, Bruxelles 1954*, pages 71–88. ????, ????, 1955. LCCN ????

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[Löw55c] Per-Olov Löwdin. Quantum theory of many-particle systems. II. Study of the ordinary Hartree–Fock approximation. *Physical Review*, 97(6):1490–1508, March 15, 1955. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://prola.aps.org/abstract/PR/v97/i6/p1490_1`.

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