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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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C [AWL+88, Harxxb]. **Ca** [HH35a]. **calcium** [HH38a]. **Calculated** [Tha39]. **Calculating** [Ano34, Ano46b, Ano88, AWL+88, Cer86, Har46b, Har47c, Har47h, Har49h, Har50d, Har53c, Har84a, Har84b, Har12, Jon04, WTE+85, WWG54, Har40b, Har46c, Har46e, Har47e, Har47f, Har47g, Har47d, Har49b, Har50a, Har52a, Ret82, Ull52, Wil84, All50, Ano51, Arn48, Bro47, Chu53, Goo51, Har51a, K.47, L.47, Mat50, Vaj51]. **Calculation** [Bar60, Bla58, Cou58, Fel74, Gel57, Har53b, Har57b, How59, May59, Mul57, Ste39, Boy50, BP54, Dav75, EHI+46, HdLKP34, HdLKP35, HI38, Har42a, Har47b, May57, SBPH73, Tru59]. **Calculations** [AAW+17, Fro57b, Har20a,

Har37a, LBV20, Gra79, Har20b, Har33d, Har34b, HH35a, Har35c, HHM40b, HHM40a, Har42b, Har50c, JOK13, OJS90, SAY+18, SSL02]. **Calculator** [AWL+88]. **calculators** [Har51b]. **Cambridge** [Har13]. **Can** [BTSB22]. **Capsule** [WTE+85]. **carbon** [Juc39]. **Card** [Cer86]. **Career** [Rei74]. **Carolina** [BCEP94]. **Carpenter** [AWL+88]. **cascade** [Har39]. **Case** [Cul94a, Cul94b]. **Centenary** [BCEP94]. **Central** [Har28a, Har28b, Har28c, Har29d, WGG20]. **Century** [Fro00, BW01b, BW01a]. **certain** [Har12, Har23b, HW37, Har41a]. **Changes** [Klu53]. **chapter** [HSxx, Harxxi, Harxxj, Harxxk, Harxxl, Harxxm, Harxxn, Harxxo, Harxxp, Harxxq]. **Chapters** [Harxxg]. **Characteristics** [Har53b]. **Charge** [Lom60, Har29b, Har41b, Har42b, Har60, MHP37]. **Charles** [AB74, Har49i, Tho63]. **Charlotte** [Cro05, Hib19]. **Chebyshev** [PY24]. **Chemical** [Cal12]. **Chemist** [Joh12]. **Chemistry** [Bee78c, DF07, GS11b, KW03, Rei05, RW15, RLM+16, SG00, Wil88, MS78, Pyy88]. **Chemists** [BI10]. **Cipher** [AWL+88, WTE+85]. **circuit** [NHP36]. **Cl** [BP54, Har33d, HH36b]. **class** [Cle51]. **classic** [Ano22]. **Classifying** [GS11a]. **clearances** [Cor33]. **cluster** [BTSB22]. **Clustered** [LWX24]. **Clustering** [PY24]. **coefficients** [BS54]. **Cognitive** [AWL+88]. **colleague** [SL11]. **Collected** [AWL+88, Dir03]. **College** [Mul57]. **Collision** [Lew39]. **collisions** [Din52d]. **Commentaries** [AWL+88]. **Comments** [Dav80]. **Committee** [KB58]. **Companies** [Rei74]. **Complete** [Hyr08]. **Complex** [CM52, Ing31, Sla29, Har36b]. **compliance** [Sum14]. **composition** [Luz31]. **Compressible** [Har53b, CH48a, CH48b, Ste49]. **Computation** [AWL+88, Cer86, BS54]. **Computational** [FBJ97, Wil88, Mar17]. **Computations** [CW85c, CW85a, Med88, CW02, RBM+23]. **Computer** [Owe86, Sma01, WTE+85, WWG51, Wil85, Ano93, CD55, CD57, Sum14, WWG54]. **Computers** [Gon24]. **Computing** [Cro90, CD74b, CW81, Fro03, GS11a, May59, Nas90, Wil97, CWL83, Har46d, HNW+48, Har48b, Har48c, HVCY21, MS86, Mor92, Cro05]. **concerning** [KB58]. **condition** [Har41a, SLT+10, SLG+10]. **conditions** [Har41b, Har43a]. **Conduction** [CN47]. **Conference** [BCEP94]. **Configuration** [AAW+17, LSAS01, Nes55a, HS37, OJS90, SAY+18, Sha98, SSL02]. **configuration-interaction** [OJS90]. **configurational** [Löw55b]. **Configurations** [Ste39, HHS39, Ste37]. **Conjugate** [Kny01, CW80]. **consistency** [Mar16]. **Consistent** [Bun90, KS65, LBV20, Sla72, Wil37, Wil40, Wil53, Fro57c, Fro57d, Fro57b, Gra61, Har33d, HH35b, HH36a, HH36b, HH36c, HH38a, HH38b, HHS39, HHM40b, HHM40a, HHM41, HH48, Juc39, May57, Ste37, Swi35, Swi36]. **consisting** [Har29b]. **Constitution** [Har32]. **Construction** [MWBS38, HP35]. **Context** [Owe86]. **Contribution** [Har25b]. **Control** [Mir21, CHP36, HPCS37]. **Controlled** [AWL+88]. **Convergence** [PS21, Löw55b]. **converging** [Din58a, Din58b, Din58c]. **Copper** [Wil37, Har26b]. **copper-like** [Har26b]. **Copy** [Har47c]. **core**

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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**

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References

Aktulga:2017:HPB

[AAW+17] Hasan Metin Aktulga, Md. Afibuzzaman, Samuel Williams, Aydin Buluc, Meiyue Shao, Chao Yang, Esmond G. Ng, Pieter Maris, and James P. Vary. A high performance block eigensolver for nuclear configuration interaction calculations. *IEEE Transactions on Parallel and Distributed Systems*, 28(6):1550–1563, June 2017. CODEN ITDSEO. ISSN 1045-9219 (print), 1558-2183 (electronic). URL `https://www.computer.org/csdl/trans/td/2017/06/07748453-abs.html`.

Altmann:1974:CAC

[AB74] S. L. Altmann and Edmund John Bowen. Charles Alfred Coulson,

1910–1974. *Biographical Memoirs of Fellows of the Royal Society*, 20:74–134, December 1974. CODEN BMFRA3. ISSN 0080-4606 (print), 1748-8494 (electronic).

Ando:1982:EPT

[AFS82] Tsuneya Ando, Alan B. Fowler, and Frank Stern. Electronic properties of two-dimensional systems. *Reviews of Modern Physics*, 54(2): 437–672, April 1982. CODEN RMPHAT. ISSN 0034-6861 (print), 1538-4527 (electronic), 1539-0756. URL `https://journals.aps.org/rmp/abstract/10.1103/RevModPhys.54.437`.

Ahlberg:1963:RFT

[Ahl63] J. H. Ahlberg. Review of *Fundamentals and Techniques of Mathematics for Scientists*, by M. M. Nicolson. *American Mathematical Monthly*, 70(5):583, May 1963. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). URL `http://www.jstor.org/stable/2312098`.

Allport:1950:RCI

[All50] Gordon W. Allport. Review of *Calculating Instruments and Machines*, by Douglas R. Hartree. *Scientific American*, 182(6):59, June 1950. CODEN SCAMAC. ISSN 0036-8733 (print), 1946-7087 (electronic). URL `http://www.jstor.org/stable/24967482; http://www.nature.com/scientificamerican/journal/v182/n6/pdf/scientificamerican0650-56.pdf`.

Anonymous:1934:CMS

[Ano34] Anonymous. Calculating machine for simultaneous equations. *Nature*, 134(3397):877, December 8, 1934. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic).

Anonymous:1935:DAU

[Ano35] Anonymous. Differential analyser for the University of Manchester. *Nature*, 135(3414):535, April 6, 1935. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic).

Anonymous:1939:DAE

[Ano39] Anonymous. The differential analyser in electrical engineering. *Nature*, 143(3610):36, January 7, 1939. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `https://www.nature.com/articles/143036a0`. Comments on [HN38a, HP38].

Anonymous:1946:IDH

[Ano46a] Anonymous. Interview with Douglas Hartree. Science Survey, BBC Home Service (radio), December 11, 1946.

Anonymous:1946:REE

[Ano46b] Anonymous. Review of *The ENIAC, an Electronic Calculating Machine*, by D. R. Hartree. *Mathematical Tables and Other Aids to Computation*, 2(16):185, October 1946. CODEN MTTCAS. ISSN 0891-6837 (print), 2326-4853 (electronic). URL `http://www.jstor.org/stable/2002581`.

Anonymous:1948:MAM

[Ano48] Anonymous. Most amazing machines still depend on man. *Los Angeles Times*, ??(??):A8, August 1, 1948. ISSN 0458-3035. URL `https://www.proquest.com/hnplatimes/docview/165831266`.

Anonymous:1949:MDA

[Ano49] Anonymous. Meccano differential analyser, 1947. Open Science Museum Group Web site, 1949. URL `https://www.jstor.org/stable/community.26290058`. This site contains photographs of the model differential analyser built by Douglas R. Hartree and Arthur Porter in 1934, and then reconstructed by Hartree in 1947. It was contributed by Hartree's son, Richard Hartree.

Anonymous:1951:RCI

[Ano51] Anonymous. Review of *Calculating Instruments and Machines I Eng. Edn.*, by D. R. Hartree. (1951). *Current Science*, 20(5):142–143, 1951. CODEN CUSCAM. ISSN 00113891. URL `http://www.jstor.org/stable/24212850`.

Anonymous:1952:MND

[Ano52] Anonymous. Members of note: Douglas Rayner Hartree, M.A., Ph.D., F.R.S. *Physics Bulletin*, 3(32):57, August 1952. CODEN PHSBB4. ISSN 0031-9112.

Anonymous:1974:VFD

[Ano74] Anonymous. Vladimir Fok dies; Soviet physicist, 76. *New York Times*, ??(??):33, December 29, 1974. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL `https://www.nytimes.com/1974/12/29/archives/vladimir-fok-dies-soviet-physicist-76.html`.

Anonymous:1988:ERH

[Ano88] Anonymous. Errata: Reviews: Hartree: Calculating Machines: Recent and Prospective Developments and Their Impact on Mathematical Physics and Calculating Instruments and Machines, 10(1) 93. *Annals of the History of Computing*, 10(3):234, July/ September 1988. CODEN AHCOE5. ISSN 0164-1239. URL `http://dlib.computer.org/an/books/an1988/pdf/a3234.pdf; http://www.computer.org/annals/an1988/a3234abs.htm`. See [AWL+88].

Anonymous:1993:OBP

[Ano93] Anonymous. Oscar Buneman, pioneer of computer simulation of space, dies at 79. Stanford University News Service, January 26, 1993. URL `https://web.archive.org/web/20221128225301/http://news.stanford.edu/pr/93/930126Arc3435.html`.

Anonymous:1998:OB

[Ano98] Anonymous. Oscar Buneman. Web site, 1998. URL `http://www.physics.ucla.edu/icnsp/buneman.htm; https://academictree.org/physics/peopleinfo.php?pid=821941`.

Anonymous:2022:PMI

[Ano22] Anonymous. *Publications of The Massachusetts Institute of Technology: October, 1924 (classic reprint)*. Forgotten Books, ????, 2022. ISBN 0-364-17189-8. LCCN ????

Arbenz:2016:LNS

[Arb16] Peter Arbenz. *Lecture Notes on Solving Large Scale Eigenvalue Problems*. Computer Science Department, ETH Zürich, Zürich, Switzerland, 2016. vi + 259 pp. URL `https://people.inf.ethz.ch/arbenz/ewp/Lnotes/lsevp.pdf`.

Arnold:1948:RCM

[Arn48] K. J. Arnold. Review of *Calculating Machines*, by D. R. Hartree. *American Mathematical Monthly*, 55(2):109, February 1948. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Arnoldi:1951:PMI

[Arn51] W. E. Arnoldi. The principle of minimized iteration in the solution of the matrix eigenvalue problem. *Quarterly of Applied Mathematics*, 9(??):17–29, ???? 1951. CODEN QAMAAY. ISSN 0033-569x (print), 1552-4485 (electronic). URL `http://www.ams.org/publications/journals/journalsframework/qam`.

Aspray:1988:RCD

[AWL+88] William Aspray, Maurice V. Wilkes, Albert C. Lewis, Greg Mellen, Harold Chucker, Robert V. D. Campbell, Wendy Wilkins, G. J. Tee, Ernest Braun, and Arthur L. Norberg. Reviews: Carpenter and Doran (eds.): A. M. Turing's ACE Report of 1946 and Other Papers; Masani (ed.): Norbert Wiener: Collected Works with Commentaries; Kozaczuk: Enigma: How the German Machine Cipher Was Broken and How It Was Read by the Allies in World War Two; Worthy: William C. Norris: Portrait of a Maverick; Harvard Computation Laboratory: A Manual of Operation for the Automatic Sequence Controlled Calculator; Proceedings of a Symposium on Large-Scale Digital Calculating Machinery; Gardner: The Mind's New Science: A History of the Cognitive Revolution; Hartree: Calculating Machines: Recent and Prospective Developments and Their Impact on Mathematical Physics and Calculating Instruments and Machines; McLean and Rowland: The Inmos Saga; Pennings and Buifendam (eds.): New Technology as Organizational Innovation: The Development and Diffusion of Microelectronics; other literature. *Annals of the History of Computing*, 10(1):80–97, January/March 1988. CODEN AHCOE5. ISSN 0164-1239. URL `http://dlib.computer.org/an/books/an1988/pdf/a1080.pdf; http://www.computer.org/annals/an1988/a1080abs.htm`. See minor erratum [Ano88]: Hartree as a mathematical physicist, not a physical chemist.

B:1953:RNA

[B.53] R. E. B. Review of *Numerical Analysis*, by D. R. Hartree. *Journal of the Institute of Actuaries (1886–1994)*, 79(1):123–124, June 1953. ISSN 0020-2681 (print), 2058-1009 (electronic). URL `http://www.jstor.org/stable/41139046`.

Bareiss:1960:RCA

[Bar60] Erwin Bareiss. Review of *The Calculation of Atomic Structures*, by D. R. Hartree. *Mathematics of Computation*, 14(71):304–305, July 1960. CODEN MCMPAF. ISSN 0025-5718 (print), 1088-6842 (electronic). URL `http://www.jstor.org/stable/2003198`.

Bennett:1950:PPE

[BBG+50] J. M. Bennett, R. A. Brooker, S. Gill, D. R. Hartree, E. N. Mutch, B. Noble, J. P. Stanley, D. J. Wheeler, M. V. Wilkes, and B. H. Worsley. Preparation of programmes for the EDSAC and the use of the library of sub-routines. Report, University Mathematical

Laboratory, Cambridge, UK, September 1950. 41 + 26 + 39 + 11 pp.

Buneman:1994:TOB

[BBP+94] Ruth Buneman, Robert J. Barker, Anthony L. Peratt, Stephen H. Brecht, A. Bruce Langdon, and H. Ralph Lewis. A tribute to Oscar Buneman — pioneer of plasma simulation. *IEEE Transactions on Plasma Science*, 22(1):22–30, February 1994. CODEN ITPSBD. ISSN 0093-3813 (print), 1939-9375 (electronic).

Brown:1994:PCL

[BCEP94] J. David Brown, Moody T. Chu, Donald C. Ellison, and Robert J. Plemmons, editors. *Proceedings of the Cornelius Lanczos International Centenary Conference, Raleigh, North Carolina, December 12–17, 1993*, volume 73 of *Proceedings in Applied Mathematics*. SIAM Press, Philadelphia, PA, USA, 1994. ISBN 0-89871-339-0. LCCN QC19.2 .C67 1993.

Beebe:1978:BGE

[Bee78a] Nelson H. F. Beebe. Bibliography on the generalized eigenvalue problem, $Ax = \lambda Bx$. In *Proceedings of the NRCC Workshop on Numerical Algorithms in Chemistry: Algebraic Methods*, pages 71–72. National Resource for Computation in Chemistry, Lawrence Berkeley Laboratory, Berkeley, CA, USA, August 9–11, 1978.

Beebe:1978:FMF

[Bee78b] Nelson H. F. Beebe. Feler's method for finding eigenvalues and eigenvectors. In Moler and Shavitt [MS78], pages 66–67. LCCN QD39.3.M3 W61 1978. URL `http://escholarship.org/uc/item/3xb320bq`. UC-32, CONF-780878.

Beebe:1978:GEP

[Bee78c] Nelson H. F. Beebe. The generalized eigenvalue problem in quantum chemistry. In Moler and Shavitt [MS78], pages 63–65. LCCN QD39.3.M3 W61 1978. URL `http://escholarship.org/uc/item/3xb320bq`. UC-32, CONF-780878.

Beutler:1962:RFT

[Beu62] Frederick J. Beutler. Review of *Fundamentals and Techniques of Mathematics for Scientists*, by M. M. Nicolson, D. R. Hartree, and D. G. Padfield. *American Scientist*, 50(3):340A–342A, September 1962. CODEN AMSCAC. ISSN 0003-0996 (print), 1545-2786 (electronic). URL `http://www.jstor.org/stable/27838503`.

Bairstow:1920:PDH

[BFH20] Leonard Bairstow, Ralph Howard Fowler, and D. R. Hartree. The pressure distribution on the head of a shell moving at high velocities. *Proceedings of the Royal Society of London. Series A, Containing Papers of a Mathematical and Physical Character*, 97(684): 202–218, May 1, 1920. ISSN 0950-1207 (print), 2053-9150 (electronic).

Barysz:2010:RMC

[BI10] Maria Barysz and Yasuyuki Ishikawa, editors. *Relativistic Methods for Chemists*, volume 10 of *Challenges and advances in computational chemistry and physics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2010. ISBN 1-282-98070-X, 1-4020-9974-6, 1-4020-9975-4. xiv + 613 pp. LCCN QD453.3 .R45 2010.

Blatt:1958:BRC

[Bla58] Frank J. Blatt. Book review: *The Calculation of Atomic Structure*, by D. R. Hartree. *American Journal of Physics*, 26(2):135–136, February 1958. CODEN AJPIAS. ISSN 0002-9505 (print), 1943-2909 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1958AmJPh..26..135H`.

Borges:1998:PDT

[BO98] Leonardo Borges and Suely Oliveira. A parallel Davidson-type algorithm for several eigenvalues. *Journal of Computational Physics*, 144(2):727–748, August 10, 1998. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199919896003X`.

Booth:1986:RDR

[Boo86] Margaret Hartree Booth. Recollections of Douglas R. Hartree. AIP manuscript, 1986. URL `https://aip.ipac.sirsidynix.net//ipac20/ipac.jsp?uri=full=3100001~!31599!0&profile=rev-icos`.

Born:1927:MA

[Bor27] Max Born. *The Mechanics of the Atom*. G. Bell and Sons, London, UK, 1927. xvi + 317 pp. English translation by Joseph William Fisher and D. R. Hartree of German original, *Atommechanik*.

Bowles:1996:UTE

[Bow96] M. D. Bowles. U.S. technological enthusiasm and British technological skepticism in the age of the analog brain. *IEEE Annals of the History of Computing*, 18(4):5–15, October/December 1996. CODEN IAHCEX. ISSN 1058-6180 (print), 1934-1547 (electronic). URL `http://ieeexplore.ieee.org/iel4/85/11673/00539911.pdf`.

Boys:1950:EWF

[Boy50] S. F. (Samuel Francis) Boys. Electronic wave functions — I. A general method of calculation for the stationary states of any molecular system. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 200(1063):542–554, February 1950. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Bethe:1935:QTD

[BP35a] H. Bethe and R. Peierls. Quantum theory of the diplon. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 148(863):146–156, January 1935. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Bethe:1935:SNP

[BP35b] Hans Albrecht Bethe and R. Peierls. The scattering of neutrons by protons. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 149(866):176–183, March 1935. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Boys:1954:EWFa

[BP54] Samuel Francis Boys and V. E. Price. Electronic wave functions — a calculation of eight variational wave functions for Cl, Cl^-, S, and S^-. *Philosophical Transactions of the Royal Society of London. Series A, Mathematical and Physical Sciences*, 246(917):451–462, June 1954. CODEN PTRMAD. ISSN 0080-4614 (print), 2054-0272 (electronic).

Bethe:1937:KEN

[BR37] H. A. Bethe and M. E. Rose. Kinetic energy of nuclei in the Hartree model. *Physical Review*, 51(4):283–285, February 15, 1937. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://prola.aps.org/abstract/PR/v51/i4/p283_1`.

Bracewell:1993:OB

[Bra93] Ronald N. Bracewell. Oscar Buneman. *Physics Today*, 46(12): 65, December 1993. CODEN PHTOAD. ISSN 0031-9228 (print), 1945-0699 (electronic).

Brown:1947:RCM

[Bro47] B. M. Brown. Review of *Calculating Machines. Recent Work and Prospective Developments*, by D. R. Hartree. *Mathematical Gazette*, 31(295):176, July 1947. CODEN MAGAAS. ISSN 00255572. URL `http://www.jstor.org/stable/3610519`.

Broadbent:1962:BRM

[Bro62] T. A. A. Broadbent. Book review: *Mathematical Methods for Technologists Fundamentals and Techniques of Mathematics for Scientists* by M. M. Nicolson, D. R. Hartree, D. G. Padfield. *Mathematical Gazette*, 46(358):334–335, December 1962. CODEN MAGAAS. ISSN 00255572. URL `http://www.jstor.org/stable/3611798`.

Boys:1954:EWFb

[BS54] Samuel Francis Boys and R. C. Sahni. Electronic wave functions — the evaluation of the general vector-coupling coefficients by automatic computation. *Philosophical Transactions of the Royal Society of London. Series A, Mathematical and Physical Sciences*, 246 (917):463–479, June 1954. CODEN PTRMAD. ISSN 0080-4614 (print), 2054-0272 (electronic).

Benedek:2022:SCC

[BTSB22] Zsolt Benedek, Paula Timár, Tibor Szilvási, and Gergely Barcza. Sensitivity of coupled cluster electronic properties on the reference determinant: Can Kohn–Sham orbitals be more beneficial than Hartree–Fock orbitals? *Journal of Computational Chemistry*, 43 (32):2103–2120, December 15, 2022. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).

Buneman:1938:LSO

[Bun38] Oscar Buneman. Linear second order differential equations having four regular singularities. M.Sc. thesis, Victoria University of Manchester, Manchester, UK, 1938. ???? pp.

Buneman:1940:LSO

[Bun40] Oscar Buneman. *The Solutions of the Spheroidal Wave Equation.* Ph.D. thesis, Victoria University of Manchester, Manchester, UK,

1940. URL https://en.wikipedia.org/wiki/Oscar_Buneman; https://www.proquest.com/pqdtglobal/docview/301225455.

Buneman:1959:DCI

[Bun59] O. Buneman. Dissipation of currents in ionized media. *Physical Review*, 115(3):503–517, August 1959. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic).

Buneman:1990:PTS

[Bun90] Oscar Buneman. Particles in their self-consistent fields: From Hartree's differential analyzer to Cray machines. In Nash [Nas90], pages 57–62. ISBN 0-201-50814-1. LCCN QA76.17 .H59 1990.

Bush:1931:DAN

[Bus31] Vannevar Bush. The differential analyzer. A new machine for solving differential equations. *Journal of The Franklin Institute*, 212(4):447–488, July/December 1931. CODEN JFINAB. ISSN 0016-0032 (print), 1879-2693 (electronic). URL https://www.sciencedirect.com/science/article/abs/pii/S0016003231906169.

Bush:1936:IA

[Bus36] Vannevar Bush. Instrumental analysis. *Bulletin of the American Mathematical Society*, 42(10):649–669, October 1936. CODEN BAMOAD. ISSN 0002-9904 (print), 1936-881X (electronic). URL https://www.ams.org/journals/bull/1936-42-10/S0002-9904-1936-06390-1/.

Brezinski:2001:NAH

[BW01a] Claude Brezinski and Luc Wuytack, editors. *Numerical Analysis: Historical Developments in the 20th Century*. Elsevier, Amsterdam, The Netherlands, 2001. ISBN 0-444-50617-9 (hardcover), 0-444-59858-8 (e-book). v + 505 pp. LCCN QA297 .N843 2001. URL https://www.sciencedirect.com/science/article/pii/B9780444506177500033.

Brezinski:2001:NAT

[BW01b] Claude Brezinski and Luc Wuytack. Numerical analysis in the twentieth century. In *Numerical Analysis: Historical Developments in the 20th Century* [BW01a], pages 1–40. ISBN 0-444-50617-9 (hardcover), 0-444-59858-8 (e-book). LCCN QA297 .N843 2001. URL https://www.sciencedirect.com/science/article/pii/B9780444506177500033.

Califano:2012:PMC

[Cal12] Salvatore Califano. *Pathways to Modern Chemical Physics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2012. ISBN 3-642-28179-6 (hardcover), 3-642-28180-X (e-book). LCCN QD453.3 .C35 2012.

Cochran:1955:UHS

[CD55] William Cochran and A. S. Douglas. The use of a high-speed digital computer for the direct determination of crystal structures. I. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 227(1171):486–500, February 1955. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Cochran:1957:UHS

[CD57] William Cochran and A. S. Douglas. The use of a high-speed digital computer for the direct determination of crystal structures. II. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 243(1233):281–288, December 1957. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Cullum:1974:BGS

[CD74a] Jane Cullum and W. E. Donath. A block generalization of the symmetric S-step Lanczos algorithm. Report RC 4845, IBM T. J. Watson Research Center, Yorktown Heights, NY, USA, May 1974.

Cullum:1974:BLA

[CD74b] Jane Cullum and W. E. Donath. A block Lanczos algorithm for computing the q algebraically largest eigenvalues and a corresponding eigenspace for large, sparse symmetric matrices. In IEEE, editor, *Proceedings of 1974 IEEE Conference on Decision and Control*, pages 505–509. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1974.

Ceruzzi:1986:RPC

[Cer86] Paul Ceruzzi. Review of *Punched Card Methods in Scientific Computation; Calculating Machines: Recent and Prospective Developments and Their Impact on Mathematical Physics and Calculating Instruments and Machines*, by W. J. Eckert & D. R. Hartree. *Isis*, 77(1):154–156, March 1986. CODEN ISISA4. ISSN 0021-1753 (print), 1545-6994 (electronic). URL `http://www.jstor.org/stable/232544`.

Coulson:1949:XNM

[CF49] Charles A. Coulson and Inga Fischer. XXXIV. Notes on the molecular orbital treatment of the hydrogen molecule. *Philosophical Magazine*, 40(303):386–393, April 1949. CODEN PHMAA4. ISSN 0031-8086. URL `https://en.wikipedia.org/wiki/Charles_Coulson; https://en.wikipedia.org/wiki/Inga_Fischer-Hjalmars; https://www.tandfonline.com/doi/abs/10.1080/14786444908521726`.

Chakravorty:1993:GSC

[CGD+93] Subhas J. Chakravorty, Steven R. Gwaltney, Ernest R. Davidson, Farid A. Parpia, and Charlotte Froese Fischer. Ground-state correlation energies for atomic ions with 3 to 18 electrons. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 47(5):3649–3670, May 1993. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `https://journals.aps.org/pra/abstract/10.1103/PhysRevA.47.3649`.

Cope:1948:LBLa

[CH48a] W. F. Cope and D. R. Hartree. The laminar boundary layer in compressible flow. *Philosophical Transactions of the Royal Society A: Mathematical, Physical, and Engineering Sciences*, 241(827):1–69, June 22, 1948. CODEN PTRMAD, PTMSFB. ISSN 0080-4614 (print), 2054-0272 (electronic).

Cope:1948:LBLb

[CH48b] W. F. Cope and D. R. Hartree. The laminar boundary layer in compressible flow. *Philosophical Transactions of the Royal Society of London. Series A, Mathematical and Physical Sciences*, 241(827):1–69, June 1948. CODEN PTRMAD. ISSN 0080-4614 (print), 2054-0272 (electronic).

Harish-Chandra:1948:REE

[cHC48] Harish chandra Harish-Chandra. Relativistic equations for elementary particles. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 192(1029):195–218, February 1948. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Crank:1939:DPC

[CHIS39] John Crank, D. R. Hartree, John Ingham, and R. W. Sloane. Distribution of potential in cylindrical thermionic valves. *Proceedings of*

the Physical Society, London, 51(6):952–971, November 1939. CODEN PPSOAU. ISSN 0959-5309 (print), 2051-2171 (electronic).

Callender:1936:TLC

[CHP36] A. Callender, D. R. Hartree, and Arthur Porter. Time-lag in a control system. *Philosophical Transactions of the Royal Society of London. Series A, Mathematical and Physical Sciences*, 235(756): 415–444, July 1936. CODEN PTRMAD. ISSN 0080-4614 (print), 2054-0272 (electronic).

Copple:1939:ETT

[CHPT39] C. Copple, D. R. Hartree, Arthur Porter, and H. Tyson. The evaluation of transient temperature distributions in a dielectric in an alternating field. *Journal of the Institution of Electrical Engineers*, 35 (511):56–66, July 1939. CODEN JISEAL. ISSN 0368-2692 (print), 2054-0574 (electronic). URL `https://digital-library.theiet.org/content/journals/10.1049/jiee-1.1939.0135`.

Church:1953:RCI

[Chu53] Alonzo Church. Review of *Calculating Instruments and Machines*, by D. R. Hartree. *Journal of Symbolic Logic*, 18(4):347, December 1953. CODEN JSYLA6. ISSN 0022-4812 (print), 1943-5886 (electronic). URL `http://www.jstor.org/stable/2266600`.

Campbell-Kelly:2006:DJW

[CK06] Martin Campbell-Kelly. David John Wheeler. 9 February 1927–13 December 2004. *Biographical Memoirs of Fellows of the Royal Society*, 52:437–453, January 2006. CODEN BMFRA3. ISSN 0080-4606 (print), 1748-8494 (electronic).

Campbell-Kelly:2014:SMV

[CK14] Martin Campbell-Kelly. Sir Maurice Vincent Wilkes. 26 June 1913–29 November 2010. *Biographical Memoirs of Fellows of the Royal Society*, 60:433–454, January 2014. CODEN BMFRA3. ISSN 0080-4606 (print), 1748-8494 (electronic). URL `https://doi.org/10.1098/rsbm.2013.0020`.

Cullum:1989:GNL

[CKW89] J. Cullum, W. Kerner, and R. Willoughby. A generalized nonsymmetric Lanczos procedure. *Computer Physics Communications*, 53(1–3):19–48, May 1989. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic).

Clemmow:1951:MES

[Cle51] P. C. Clemmow. A method for the exact solution of a class of two-dimensional diffraction problems. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 205 (1081):286–308, February 1951. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Clemmow:1953:RPF

[Cle53] P. C. Clemmow. Radio propagation over a flat Earth across a boundary separating two different media. *Philosophical Transactions of the Royal Society of London. Series A, Mathematical and Physical Sciences*, 246(905):1–55, June 1953. CODEN PTRMAD. ISSN 0080-4614 (print), 2054-0272 (electronic).

Clemmow:1949:TFP

[CM49] P. C. Clemmow and Cara M. Munford. A theory of the film phenomena of liquid helium II. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 198(1054): 438–446, August 1949. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Clemmow:1952:TCV

[CM52] P. C. Clemmow and Cara M. Munford. A table of $\sqrt{(1/2)\pi}e^{(1/2)\pi\rho^2}\int_\rho^\infty e^{-(1/2)i\pi\lambda^2}\,d\lambda$ for complex values of ρ. *Philosophical Transactions of the Royal Society of London. Series A, Mathematical and Physical Sciences*, 245(895):189–211, September 1952. CODEN PTRMAD. ISSN 0080-4614 (print), 2054-0272 (electronic).

Cossons:2013:MST

[CMH+13] Neil Cossons, Peter Morris, James C. Hart, Lesley Henderson, and Philip Sayer, editors. *Milestones of Science and Technology: Making of the Modern World*. KWS, Chicago, IL, USA, second edition, 2013. ISBN 0-9817736-5-6. 270 + 113 pp. LCCN QA76 .M55 2013.

Crank:1947:PMN

[CN47] John Crank and Phyllis Nicolson. A practical method for numerical evaluation of solutions of partial differential equations of the heat-conduction type. *Mathematical proceedings of the Cambridge Philosophical Society*, 43(1):50–67, January 1947. CODEN MPCPCO. ISSN 0305-0041 (print), 1469-8064 (electronic). URL `https://en.wikipedia.org/wiki/Crank%E2%80%93Nicolson_method`.

Cossons:1992:MMW

[CNT92] Neil Cossons, Andrew Nahum, and Peter Turvey. *Making of the Modern World: Milestones of Science and Technology*. J. Murray in association with the Science Museum, London, UK, 1992. ISBN 0-7195-5121-8 (hardcover). 224 pp. LCCN T15 .M23 1992.

Cooper:1948:SNF

[Coo48] J. L. B. Cooper. The solution of natural frequency equations by relaxation methods. *Quarterly of Applied Mathematics*, 6 (??):179–183, ???? 1948. CODEN QAMAAY. ISSN 0033-569x (print), 1552-4485 (electronic). URL `http://www.ams.org/publications/journals/journalsframework/qam`.

Cornish:1933:FWT

[Cor33] R. J. Cornish. Flow of water through fine clearances with relative motion of the boundaries. *Proceedings of the Royal Society of London. Series A, Containing Papers of a Mathematical and Physical Character*, 140(840):227–240, April 1933. ISSN 0950-1207 (print), 2053-9150 (electronic).

Coulson:1958:RCA

[Cou58] C. A. Coulson. Review of *The Calculation of Atomic Structures*, by D. R. Hartree. *Science Progress (1933–)*, 46(181):164–165, January 1958. CODEN SCPRAY. ISSN 0036-8504 (print), 2047-7163 (electronic). URL `http://www.jstor.org/stable/43424681`.

Coulson:1973:SFB

[Cou73] C. A. (Charles Alfred) Coulson. Samuel Francis Boys, 1911–1972. *Biographical Memoirs of Fellows of the Royal Society*, 19:94–115, December 1973. CODEN BMFRA3. ISSN 0080-4606 (print), 1748-8494 (electronic).

Crouzeix:1994:DM

[CPS94] M. Crouzeix, B. Philippe, and M. Sadkane. The Davidson method. *SIAM Journal on Scientific Computing*, 15(1):62–76, January 1994. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic).

Crank:1938:TBL

[Cra38] John Crank. The treatment of a boundary layer and two valve problems by the differential analyser. M.Sc. thesis, Victoria University of Manchester, Manchester, UK, 1938. ???? pp.

URL https://mathshistory.st-andrews.ac.uk/Biographies/Crank/; https://www.proquest.com/pqdtglobal/docview/301230033/.

Crank:1947:DA

[Cra47] John Crank. *The differential analyser*. Longmans, London, UK, 1947. 137 + 4 pp.

Croarken:1990:ESC

[Cro90] Mary Croarken. *Early Scientific Computing in Britain*. Clarendon Press, Oxford, UK, 1990. ISBN 0-19-853748-4. 160 + 8 pp. LCCN Q183.9 .C76 1990. URL http://books.google.com/books?id=OW1QAAAAMAAJ; http://catalog.hathitrust.org/api/volumes/oclc/20452712.html.

Croarken:2005:BRD

[Cro05] Mary Croarken. Book review: *Douglas Rayner Hartree: His Life in Science and Computing* by Charlotte Froese Fischer. *Technology and Culture*, 46(4):859–860, October 2005. CODEN TECUA3. ISSN 0040-165X (print), 1097-3729 (electronic). URL http://www.jstor.org/stable/40060989.

Croarken:2008:HDR

[Cro08] Mary Croarken. Hartree, Douglas Rayner. In *Complete Dictionary of Scientific Biography* [Hyr08], pages 147–148. ISBN 0-684-31559-9. LCCN ????

Cullum:1994:BLAa

[Cul94a] Jane K. Cullum. Block Lanczos algorithms for large matrix eigenvalue problems: Part I. real symmetric case. In Brown et al. [BCEP94], pages 313–315. ISBN 0-89871-339-0. LCCN QC19.2 .C67 1993.

Cullum:1994:BLAb

[Cul94b] Jane K. Cullum. Block Lanczos algorithms for large matrix eigenvalue problems: Part II. nonsymmetric case. In Brown et al. [BCEP94], pages 316–318. ISBN 0-89871-339-0. LCCN QC19.2 .C67 1993.

Cullum:1994:LAL

[Cul94c] Jane K. Cullum. Lanczos algorithms for large scale symmetric and nonsymmetric matrix eigenvalue problems. In Brown et al. [BCEP94], pages 11–31. ISBN 0-89871-339-0. LCCN QC19.2 .C67 1993.

Cullum:1996:AVN

[Cul96] Jane Cullum. Arnoldi versus nonsymmetric Lanczos algorithms for solving matrix eigenvalue problems. *BIT Numerical Mathematics*, 36(3):470–493, September 1996. CODEN BITTEL, NBITAB. ISSN 0006-3835 (print), 1572-9125 (electronic). URL `http://www.mai.liu.se/BIT/contents/bit36.html; http://www.springerlink.com/openurl.asp?genre=article&issn=0006-3835&volume=36&issue=3&spage=470`. International Linear Algebra Year (Toulouse, 1995).

Cullum:1980:LPI

[CW80] Jane Cullum and Ralph A. Willoughby. The Lanczos phenomenon—an interpretation based upon conjugate gradient optimization. *Linear Algebra and its Applications*, 29(??):63–90, February 1980. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic).

Cullum:1981:CEV

[CW81] Jane Cullum and Ralph A. Willoughby. Computing eigenvalues of very large symmetric matrices—an implementation of a Lanczos algorithm with no reorthogonalization. *Journal of Computational Physics*, 44(2):329–358, December 1981. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0021999181900565`.

Cullum:1984:LPM

[CW84] Jane Cullum and Ralph A. Willoughby. A Lanczos procedure for the modal analysis of very large nonsymmetric matrices. In IEEE, editor, *The 23rd IEEE Conference on Decision and Control, December 12–14, 1984, Las Vegas, Nevada*, volume 23, pages 1758–1761. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, December 1984. ISBN ???? LCCN ???? IEEE Catalog Number 79-640961.

Cullum:1985:LALb

[CW85a] J. Cullum and R. A. Willoughby. *Lanczos Algorithms for Large Symmetric Eigenvalue Computations, Volume 2: Programs*. Birkhäuser Verlag, Basel, Switzerland, 1985.

Cullum:1985:SLP

[CW85b] Jane Cullum and Ralph A. Willoughby. A survey of Lanczos procedures for very large real 'symmetric' eigenvalue problems. *Journal of Computational and Applied Mathematics*, 12–13(??):37–60, May

1985. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic).

Cullum:1985:LALa

[CW85c] Jane K. Cullum and Ralph A. Willoughby. *Lanczos Algorithms for Large Symmetric Eigenvalue Computations, Volume 1. Theory*. Birkhäuser Verlag, Basel, Switzerland, 1985. ISBN 0-8176-3292-1 (Boston: set), 0-8176-3058-9 (Boston: vol. 1), 0-8176-3294-8 (Boston: vol. 2), 3-7643-3292-6 (Basel: set), 3-7643-3058-9 (Basel: vol. 1), 3-7643-3294-8 (Basel: vol. 2). xiv + 273 pp. LCCN QA193 .C84 1985. URL `https://www.math.utah.edu/pub/bibnet/subjects/acc-stab-num-alg.bib`.

Cullum:2002:LAL

[CW02] Jane K. Cullum and Ralph A. Willoughby. *Lanczos algorithms for large symmetric eigenvalue computations*, volume 41 of *Classics in applied mathematics*. SIAM Press, Philadelphia, PA, USA, 2002. ISBN 0-89871-523-7 (paperback). xx + 268 pp. LCCN QA193 .C84 2002. URL `http://www.loc.gov/catdir/enhancements/fy0664/2002075847-d.html; http://www.loc.gov/catdir/enhancements/fy0664/2002075847-t.html`.

Cullum:1983:LAC

[CWL83] Jane Cullum, Ralph A. Willoughby, and Mark Lake. A Lanczos algorithm for computing singular values and vectors of large matrices. *SIAM Journal on Scientific and Statistical Computing*, 4(2): 197–215, June 1983. CODEN SIJCD4. ISSN 0196-5204.

Cullum:2002:TSA

[CZ02] Jane Cullum and Tong Zhang. Two-sided Arnoldi and nonsymmetric Lanczos algorithms. *SIAM Journal on Matrix Analysis and Applications*, 24(2):303–319, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33901`.

Darwin:2004:HDR

[DA04] Charles G. Darwin and Jon Agar. Hartree, Douglas Rayner (1897–1958), mathematician and theoretical physicist. In *Oxford Dictionary of National Biography*, page ?? Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2004. URL `https://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-33743`.

Darwin:1958:DRH

[Dar58] Charles Galton Darwin. Douglas Rayner Hartree, 1897–1958. *Biographical Memoirs of Fellows of the Royal Society*, 4:102–116, November 1958. CODEN BMFRA3. ISSN 0080-4606 (print), 1748-8494 (electronic).

Davis:1959:RNA

[Dav59] Philip J. Davis. Review of *Numerical Analysis*, by D. R. Hartree. *American Mathematical Monthly*, 66(7):600–601, August/ September 1959. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Davidson:1975:NIC

[Dav75] Ernest R. Davidson. Note: The iterative calculation of a few of the lowest eigenvalues and corresponding eigenvectors of large real-symmetric matrices. *Journal of Computational Physics*, 17(1):87–94, January 1975. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://comptop.stanford.edu/u/references/da.pdf; http://www.sciencedirect.com/science/article/pii/0021999175900650`. This paper generalizes the work of Lanczos [Lan50] by a modification that improves the convergence. See also later generalizations [MS86, Ret82, Sad89].

Davidson:1978:EME

[Dav78] E. R. Davidson. Expansion methods for eigenvectors of large matrices. In Moler and Shavitt [MS78], pages 15–25. LCCN QD39.3.M3 W61 1978. URL `http://escholarship.org/uc/item/3xb320bq`. UC-32, CONF-780878.

Davidson:1980:CKT

[Dav80] E. R. Davidson. Comments on the Kalamboukis tests of the Davidson algorithm. *Journal of Physics A (Mathematical and General)*, 13(6):L179–L180, June 1980. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `https://iopscience.iop.org/article/10.1088/0305-4470/13/6/002`. See [Kal80].

Davidson:1989:SMM

[Dav89] Ernest R. Davidson. Super-matrix methods. *Computer Physics Communications*, 53(1–3):49–60, May 1989. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0010465589901471`.

Davidson:1993:MMT

[Dav93] Ernest R. Davidson. Monster matrices: Their eigenvalues and eigenvectors. *Computers in Physics*, 7(5):519–522, September 1993. CODEN CPHYE2. ISSN 0894-1866 (print), 1558-4208 (electronic). URL `https://aip.scitation.org/doi/10.1063/1.4823212`. See [LGGT93].

Desclaux:1973:RDF

[Des73] J. P. Desclaux. Relativistic Dirac–Fock expectation values for atoms with $Z = 1$ to $Z = 120$. *Atomic Data and Nuclear Data Tables*, 12(4):311–406, 1973. CODEN ADNDAT. ISSN 0092-640X (print), 1090-2090 (electronic). URL `https://www.sciencedirect.com/science/article/abs/pii/0092640X7390020X`.

Dyall:2007:IRQ

[DF07] Kenneth G. Dyall and Knut Faegri. *Introduction to Relativistic Quantum Chemistry*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2007. ISBN 0-19-803230-7. xiv + 530 pp. LCCN ????

Davidson:1991:GSC

[DHC+91] Ernest R. Davidson, Stanley A. Hagstrom, Subhas J. Chakravorty, Verena Meiser Umar, and Charlotte Froese Fischer. Ground-state correlation energies for two- to ten-electron atomic ions. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 44(11):7071–7083, December 1991. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `https://journals.aps.org/pra/abstract/10.1103/PhysRevA.44.7071`.

Douglas:1955:AWF

[DHR55] A. S. Douglas, D. R. Hartree, and W. A. Runciman. Atomic wave functions for gold and thallium. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 51(3): 486–503, July 1955. CODEN PCPSA4. ISSN 0008-1981.

Dingle:1952:SMPc

[Din52a] R. B. Dingle. Some magnetic properties of metals — III. Diamagnetic resonance. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 212(1108):38–47, April 1952. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic). URL `https://doi.org/10.1098/rspa.1952.0064`.

Dingle:1952:SMPd

[Din52b] R. B. Dingle. Some magnetic properties of metals — IV. Properties of small systems of electrons. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 212(1108): 47–65, April 1952. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Dingle:1952:SMPa

[Din52c] R. B. Dingle. Some magnetic properties of metals. I. General introduction, and properties of large systems of electrons. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 211(1107):500–516, March 1952. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Dingle:1952:SMPb

[Din52d] R. B. Dingle. Some magnetic properties of metals II. The influence of collisions on the magnetic behaviour of large systems. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 211(1107):517–525, March 1952. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Dingle:1952:MPM

[Din52e] Robert Balson Dingle. *The Magnetic Properties of Metals*. Ph.D. thesis, Faculty of Physics and Chemistry, Cambridge University, Cambridge, UK, January 24, 1952. ???? pp. URL `https://en.wikipedia.org/wiki/Robert_Balson_Dingle; https://www.proquest.com/pqdtglobal/docview/302092416/`.

Dingle:1953:SMP

[Din53a] R. B. Dingle. Some magnetic properties of metals. V. Magnetic behaviour of a cylindrical system of electrons for all magnetic fields. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 216(1124):118–142, January 1953. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Dingle:1953:SMPa

[Din53b] R. B. Dingle. Some magnetic properties of metals. V. Magnetic behaviour of a cylindrical system of electrons for all magnetic fields. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 216(1124):118–142, January 1953. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Dingle:1953:SMPb

[Din53c] R. B. Dingle. Some magnetic properties of metals VI. surface corrections to the Landau diamagnetism and the de Haas–van Alphen effect. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 219(1139):463–477, October 1953. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Dingle:1958:AECa

[Din58a] R. B. Dingle. Asymptotic expansions and converging factors. I. General theory and basic converging factors. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 244(1239):456–475, April 1958. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Dingle:1958:AECb

[Din58b] R. B. Dingle. Asymptotic expansions and converging factors II. Error, Dawson, Fresnel, exponential, sine and cosine, and similar integrals. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 244(1239):476–483, April 1958. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Dingle:1958:AECc

[Din58c] R. B. Dingle. Asymptotic expansions and converging factors. III. Gamma, psi and polygamma functions, and Fermi–Dirac and Bose–Einstein integrals. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 244(1239):484–490, April 1958. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Dirac:1929:QMM

[Dir29] P. A. M. Dirac. Quantum mechanics of many electron systems. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 123(792):714–733, April 6, 1929. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic). URL `http://www.jstor.org/stable/95222`. Russian translation in [Dir03, Vol. II, pp. 213ff].

Dirac:2003:SNT

[Dir03] P. A. M. Dirac. *Sobranie Nauchnykh Trudov T. II. Kvantovaya Teoriya (Nauchnye Stat'i: 1924–1947). (Russian) [Collected Scientific Works. Quantum Theory (Scientific Papers: 1924–1947)].*

Klassiki Nauki. Fizmatlit, Moscow, Russia, 2003. ISBN 5-9221-0381-4. 846 pp. LCCN ???? Edited by A. D. Sukhanov.

Domb:1949:ODSb

[Dom49a] C. Domb. Order–disorder statistics. II. a two-dimensional model. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 199(1057):199–221, October 1949. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Domb:1949:ODSa

[Dom49b] Cyril Domb. Order–disorder statistics. I. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 196(1044):36–50, February 1949. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Dwyer:1955:RNA

[Dwy55] P. S. Dwyer. Review of *Numerical Analysis*, by D. R. Hartree. *Econometrica*, 23(1):104–105, January 1955. CODEN ECMTA7. ISSN 0012-9682. URL `http://www.jstor.org/stable/1905587`.

Eyres:1946:CVH

[EHI+46] Nicholas R. Eyres, Douglas Rayner Hartree, John Ingham, R. J. Sarjant, and J. B. Wagstaff. The calculation of variable heat flow in solids. *Philosophical Transactions of the Royal Society A: Mathematical, Physical, and Engineering Sciences*, 240(813):1–57, August 2, 1946. CODEN PTRMAD, PTMSFB. ISSN 0080-4614 (print), 2054-0272 (electronic). URL `https://royalsocietypublishing.org/toc/rsta1934/1946/240/813`.

FroeseFischer:1997:CAS

[FBJ97] Charlotte Froese Fischer, Tomas Brage, and Per Jónsson. *Computational Atomic Structure: an MCHF Approach*. IOP Publishing, Bristol, UK, 1997. ISBN 0-7503-0374-3 (hardcover), 0-7503-0466-9 (paperback). xi + 279 pp. LCCN QC173.4.A87. URL `http://catdir.loc.gov/catdir/enhancements/fy0701/97010464-d.html; http://www.gbv.de/dms/bowker/toc/9780750304665.pdf; http://www.zentralblattmath.org/zmath/en/search/?an=0997.00542`.

Feler:1974:CEL

[Fel74] M. Guy Feler. Calculation of eigenvectors of large matrices. *Journal of Computational Physics*, 14(4):341–349, March 1974. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716

(electronic). URL `http://www.sciencedirect.com/science/article/pii/0021999174900175`.

Fowler:1926:ISI

[FH26] Ralph Howard Fowler and D. R. Hartree. An interpretation of the spectrum of ionised oxygen (O II). *Proceedings of the Royal Society of London. Series A, Containing Papers of a Mathematical and Physical Character*, 111(757):83–94, May 1, 1926. ISSN 0950-1207 (print), 2053-9150 (electronic). URL `http://www.jstor.org/stable/94664`.

Froese:1957:WFN

[FH57] Charlotte Froese and D. R. Hartree. Wave functions for the normal states of Ne^{+3} and Ne^{+4}. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 53(3):663–668, July 1957. CODEN PCPSA4. ISSN 0008-1981.

Flint:1928:RMA

[Fli28] H. T. Flint. Review of *The Mechanics of the Atom*, by M. Born, J. W. Fisher, and D. R. Hartree. *Science Progress in the Twentieth Century (1919–1933)*, 22(87):524, January 1928. CODEN ???? ISSN 2059-4941 (print), 2059-9897 (electronic). URL `http://www.jstor.org/stable/43432721`.

Fock:1930:SFA

[Foc30a] V. Fock. „Selfconsistent field" mit Austausch für Natrium. (German) ["Selfconsistent field" with substitution for sodium]. *Zeitschrift für Physik*, 62(11–12):795–805, November 1930. CODEN ZEPYAA. ISSN 0044-3328. URL `https://doi.org/10.1007/bf01330439`.

Fock:1930:NLQ

[Foc30b] Vladimir Fock. Näherungsmethode zur Lösung des quantenmechanischen Mehrkörperproblems. (German) [Approximate method for solving the quantum mechanical many-body problem]. *Zeitschrift für Physik*, 61(1–2):126–148, January 1930. CODEN ZEPYAA. ISSN 0044-3328. Presented at the Russian Physico-Chemical Society on 17 December 1929. This paper introduces determinantal wavefunctions to guarantee correct symmetry under particle exchange.

Fowler:1927:BRM

[Fow27a] Ralph H. Fowler. Book review: *The Mechanics of the Atom*, by Max Born. Translated by J. W. Fisher, and revised by D. R. Hartree. *Mathematical Gazette*, 13(190):428–429, October 1927. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic). URL `http://www.jstor.org/stable/pdfplus/3602769.pdf`.

Fowler:1927:RMA

[Fow27b] Ralph H. Fowler. Review of *The Mechanics of the Atom*, by Max Born, J. W. Fisher, and D. R. Hartree. *Mathematical Gazette*, 13 (190):428–429, October 1927. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic). URL `http://www.jstor.org/stable/3602769`.

Froese:1957:LBA

[Fro57a] Charlotte Froese. The limiting behaviour of atomic wave functions for large atomic number. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 239(1218): 311–319, March 1957. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Froese:1957:SCFc

[Fro57b] Charlotte Froese. *Self-consistent Field Calculations with Exchange*. Ph.D. thesis, Faculty of Mathematics, University of Cambridge, Cambridge, UK, November 19, 1957. ???? pp. URL `https://en.wikipedia.org/wiki/Charlotte_Froese_Fischer; https://en.wikipedia.org/wiki/Michael_J._Fischer; https://en.wikipedia.org/wiki/Patrick_C._Fischer; https://www.proquest.com/pqdtglobal/docview/301289544/`.

Froese:1957:SCFa

[Fro57c] Charlotte Froese. The self-consistent field with exchange for some 10 and 12 electron systems. *Mathematical proceedings of the Cambridge Philosophical Society*, 53(1):206–213, January 1957. CODEN MPCPCO. ISSN 0305-0041 (print), 1469-8064 (electronic).

Froese:1957:SCFb

[Fro57d] Charlotte Froese. The self-consistent field with exchange for the ground state and first excited state of Fe^{+13}. *Monthly Notices of the Royal Astronomical Society*, 117(6):615–621, December 1957. CODEN MNRAA4. ISSN 0035-8711 (print), 1365-2966 (electronic).

URL https://academic.oup.com/mnras/article/117/6/615/2602166; https://adsabs.harvard.edu/full/1957MNRAS.117..615F.

Froese:1958:LBA

[Fro58] Charlotte Froese. The limiting behaviour of atomic wave functions for large atomic number. II. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 244(1238): 390–397, March 1958. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

FroeseFischer:1977:HFM

[Fro77] Charlotte Froese Fischer. *The Hartree–Fock Method for Atoms: a Numerical Approach*. Wiley, New York, NY, USA, 1977. ISBN 0-471-25990-X. xi + 308 pp. LCCN QC173.F527.

FroeseFischer:2000:REC

[Fro00] Charlotte Froese Fischer. Reminiscences at the end of the century. *Molecular Physics*, 98(16):1043–1050, August 2000. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic). URL https://www.tandfonline.com/doi/abs/10.1080/00268970050080393.

FroeseFischer:2003:DRH

[Fro03] Charlotte Froese Fischer. *Douglas Rayner Hartree: His Life in Science and Computing*. World Scientific Publishing Co. Pte. Ltd., P. O. Box 128, Farrer Road, Singapore 9128, 2003. ISBN 981-238-577-0. xviii + 250 pp. LCCN Q143.H37. URL http://ebooks.worldscinet.com/ISBN/9789812795014/9789812795014.html.

Gaspar:1954:AHF

[Gás54] R. Gáspár. Über eine Approximation des Hartree–Fockschen Potentials Durch eine Universelle Potentialfunktion. (German) [On an approximation of the Hartree–Fock potential by a universal potential function]. *Acta physica Academiae Scientiarum Hungaricae*, 3 (3–4):263–286, April 1954. CODEN APAHAQ. ISSN 0001-6705 (print), 2064-3047 (electronic). URL http://www.springerlink.com/content/w24337x7040846x5/. In this paper, the Hartree–Fock–Slater X-α equations [Sla51b, Sla72] are rederived by an independent method, with the prediction of a value $\alpha = 2/3$, instead of Slater's original $\alpha = 1$. The same factor was later rediscovered in independent work [KS65].

Gaunt:1928:THA

[Gau28] J. A. (John Arthur) Gaunt. A theory of Hartree's atomic fields. *Mathematical proceedings of the Cambridge Philosophical Society*, 24(2):328–342, April 1928. CODEN MPCPCO. ISSN 0305-0041 (print), 1469-8064 (electronic).

Gaunt:1929:ITH

[Gau29] J. A. (John Arthur) Gaunt. IV. The triplets of helium. *Philosophical Transactions of the Royal Society of London. Series A, Containing Papers of a Mathematical or Physical Character*, 228 (659-669):151–196, January 1929. ISSN 0264-3952 (print), 2053-9258 (electronic). URL `https://en.wikipedia.org/wiki/3-j_symbol; https://royalsocietypublishing.org/doi/epdf/10.1098/rsta.1929.0004`.

Geltman:1957:BRC

[Gel57] Sydney Geltman. Book review: *The Calculation of Atomic Structures*, by Douglas R. Hartree. 181 pages, 6×9 in. New York, John Wiley & Sons, Inc., 1957. *Journal of The Franklin Institute*, 264 (1):69, July 1957. CODEN JFINAB. ISSN 0016-0032 (print), 1879-2693 (electronic). URL `https://www.sciencedirect.com/science/article/abs/pii/0016003257908591`.

Gebelein:2011:FRG

[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`.

Goodwin:1957:MNA

[GHF57] E. T. (Eric Thomson) Goodwin, D. R. Hartree, and Leslie Fox, editors. *Monographs on Numerical Analysis*. Clarendon Press, Oxford, UK, 1957. ???? pp. LCCN ????

Gill:1951:DMP

[Gil51] S. Gill. The diagnosis of mistakes in programmes on the EDSAC. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 206(1087):538–554, May 1951. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Goncalves:2024:LLO

[Gon24] Bernardo Gonçalves. Lady Lovelace's objection: The Turing–Hartree disputes over the meaning of digital computers, 1946–1951. *IEEE Annals of the History of Computing*, 46(1):6–18, January/March 2024. CODEN IAHCEX. ISSN 1058-6180 (print), 1934-1547 (electronic).

Good:1951:BRC

[Goo51] I. J. Good. Book review: *Calculating Instruments and Machines*, by D. R. Hartree. *Journal of the Royal Statistical Society. Series A (General)*, 114(1):106–107, ???? 1951. CODEN JSSAEF. ISSN 0035-9238. URL `http://www.jstor.org/stable/2980914`.

Grant:1961:RSC

[Gra61] Ian Philip Grant. Relativistic self-consistent fields. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 262(1311):555–576, August 8, 1961. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic). URL `https://royalsocietypublishing.org/doi/10.1098/rspa.1961.0139`.

Grant:1979:RAS

[Gra79] I. P. Grant. Relativistic atomic structure calculations. *Computer Physics Communications*, 17(1–2):149–161, April/May 1979. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0010465579900778`.

Gavroglou:2011:DRH

[GS11a] Kōstas Gavroglou and Ana Simões. Douglas Rayner Hartree: "A computing and classifying physicist". In *Neither Physics nor Chemistry: a History of Quantum Chemistry* [GS11b], chapter 3 [subsection], pages 138–143. ISBN 0-262-01618-4 (hardcover), 0-262-29875-9 (e-book), 1-283-30283-7. LCCN QD462 .G38 2012. URL `http://mitpress.mit.edu/9780262016186`.

Gavroglou:2011:NPN

[GS11b] Kōstas Gavroglou and Ana Simões. *Neither Physics nor Chemistry: a History of Quantum Chemistry*. MIT Press, Cambridge, MA, USA, 2011. ISBN 0-262-01618-4 (hardcover), 0-262-29875-9 (e-book), 1-283-30283-7. xiv + 351 pp. LCCN QD462 .G38 2012. URL `http://mitpress.mit.edu/9780262016186`.

Gates:1962:HBS

[GY62] Sidney Barrington Gates and Alec David Young. Herbert Brian Squire, 1909–1961. *Biographical Memoirs of Fellows of the Royal Society*, 8:118–135, November 1962. CODEN BMFRA3. ISSN 0080-4606 (print), 1748-8494 (electronic). URL `https://royalsocietypublishing.org/doi/epdf/10.1098/rsbm.1962.0009`.

Hartree:1912:OCP

[Har12] D. R. Hartree. Observations on certain periodic properties of numbers. *J. Bedales School Sci. Soc.*, (2):29, 1912.

Hartree:1913:MRC

[Har13] D. R. Hartree. The May races, Cambridge, 1913. *Bedales Chronicle*, ??(??):??, June 1913.

Hartree:1920:BCa

[Har20a] D. R. Hartree. Ballistic calculations. *Nature*, 106(2657):152–154, September 30, 1920. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic).

Hartree:1920:BCb

[Har20b] D. R. Hartree. Ballistic calculations. *Nature*, 106(2659):232, October 14, 1920. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `https://www.nature.com/articles/106232a0`.

Hartree:1923:CNU

[Har23a] D. R. Hartree. On the correction for non-uniformity of field in experiments on the magnetic deflection of β-rays. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 21(??):746–752, ???? ??, 1923. CODEN PCPSA4. ISSN 0008-1981.

Hartree:1923:PCT

[Har23b] D. R. Hartree. On the propagation of certain types of electromagnetic waves. *Philosophical Magazine*, 46(273):454–460, 1923. CODEN PHMAA4. ISSN 0031-8086. URL `https://www.tandfonline.com/doi/full/10.1080/14786442308634268`.

Hartree:1923:SAN

[Har23c] D. R. Hartree. Some approximate numerical applications of Bohr's theory of spectra. *Proceedings of the Cambridge Philosophical So-*

ciety. Mathematical and physical sciences, 21(??):625–641, ???? 1923. CODEN PCPSA4. ISSN 0008-1981. URL `https://www.biodiversitylibrary.org/item/88477#page/653/mode/1up`.

Hartree:1923:ASR

[Har23d] D. R. Hartree, B.A. On atomic structure and the reflection of X-rays by crystals. *Philosophical Magazine*, 46(276):1091–1111, 1923. CODEN PHMAA4. ISSN 0031-8086.

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`.

Hartree:1924:SRB

[Har24b] D. R. Hartree. Some relations between the optical spectra of different atoms of the same electron structure. I. — Lithium-like and sodium-like atoms. *Proceedings of the Royal Society of London. Series A, Containing Papers of a Mathematical and Physical Character*, 106(739):552–580, November 1, 1924. ISSN 0950-1207 (print), 2053-9150 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1924RSPSA.106..552H`.

Hartree:1924:SSL

[Har24c] D. R. Hartree. The spectra of some lithium-like and sodium-like atoms. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 22(3):409–425, September 20, 1924. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1924PCPS...22..409H`.

Hartree:1925:ASF

[Har25a] D. R. Hartree. The atomic structure factor in the intensity of reflection of X-rays by crystals. *Philosophical Magazine*, 50(295):289–306, 1925. CODEN PHMAA4. ISSN 0031-8086. URL `https://www.tandfonline.com/doi/full/10.1080/14786442508634740`.

Hartree:1925:CTB

[Har25b] D. R. Hartree. Contribution to *Text-Book of Anti-Aircraft Gunnery*. Report 1, His Majesty's Stationery Office, London, UK, 1925.

Hartree:1925:DTS

[Har25c] D. R. Hartree. Doublet and triplet separations in optical spectra as evidence whether orbits penetrate into the core. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 22(6):904–918, November 1925. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1925PCPS...22..904H`.

Hartree:1925:IPI

[Har25d] D. R. Hartree. The ionisation potential of ionised manganese. *Nature*, 116(2914):356, September 5, 1925. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1925Natur.116Q.356H`.

Hartree:1925:NDT

[Har25e] D. R. Hartree. Note on Dr Turner's paper on 'Quantum defect and atomic number'. *Philosophical Magazine*, 49(290):390–396, 1925. CODEN PHMAA4. ISSN 0031-8086. URL `https://www.tandfonline.com/doi/abs/10.1080/14786442508634615`.

Hartree:1926:SQA

[Har26a] D. R. Hartree. *Some Quantitative Applications of Bohr's Theory of Spectra*. Ph.D. thesis, Faculty of Physics and Chemistry, University of Cambridge, Cambridge, UK, October 9, 1926. ???? pp. URL `https://idiscover.lib.cam.ac.uk/permalink/f/iojq9k/44CAM_ALMA21428192490003606`; `https://www.proquest.com/pqdtglobal/docview/301187054`.

Hartree:1926:SRB

[Har26b] D. R. Hartree. Some relations between the optical spectra of different atoms with the same electronic structure. Part II. Aluminium-like and copper-like atoms. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 23(3):304–326, July 1926. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1926PCPS...23..304H`.

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.

Hartree:1928:WMAb

[Har28b] D. R. Hartree. The wave mechanics of an atom with a non-Coulomb central field. Part II. Some results and discussion. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 24(1):111–132, January 1928. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1928PCPS...24..111H`.

Hartree:1928:WMAc

[Har28c] D. R. Hartree. The wave mechanics of an atom with a non-Coulomb central field. Part III. Term values and intensities in optical spectra. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 24(3):426–437, July 1928. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1928PCPS...24...89H`.

Hartree:1929:EIA

[Har29a] D. R. Hartree. Die Elektrizitätsverteilung im Atom. (German) [The distribution of electricity in the atom]. *Physikalische Zeitschrift*, 30 (??):517–518, ???? ??, 1929. CODEN PHZTAO. ISSN 0369-982X. Summary of lecture at Zürich conference.

Hartree:1929:DCC

[Har29b] D. R. Hartree. The distribution of charge and current in an atom consisting of many electrons obeying Dirac's equations. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 25(2):225–236, April 1929. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1929PCPS...25..225H`.

Hartree:1929:PEW

[Har29c] D. R. Hartree. The propagation of electromagnetic waves in a stratified medium. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 25(1):97–120, January 1929.

CODEN PCPSA4. ISSN 0008-1981. URL https://ui.adsabs.harvard.edu/abs/1929PCPS...25...97H.

Hartree:1929:WMA

[Har29d] D. R. Hartree. The wave mechanics of an atom with a non-Coulomb central field. Part IV. Further results relating to the optical spectrum. *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.

Hartree:1931:OEP

[Har31a] D. R. Hartree. Optical and equivalent paths in a stratified medium, treated from a wave standpoint. *Proceedings of the Royal Society of London. Series A, Containing Papers of a Mathematical and Physical Character*, 131(817):428–450, May 1931. ISSN 0950-1207 (print), 2053-9150 (electronic). URL https://ui.adsabs.harvard.edu/abs/1931RSPSA.131..428H.

Hartree:1931:PEW

[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.

Hartree:1931:WMF

[Har31c] D. R. Hartree. The wave mechanics of free electrons. *Nature*, 128(3219):47–49, July 11, 1931. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL https://ui.adsabs.harvard.edu/abs/1931Natur.128...47H.

Hartree:1932:RCA

[Har32] D. R. Hartree. Review: *The Constitution of Atomic Nuclei and Radioactivity* by George Gamow. *Mathematical Gazette*, 16(220): 284–285, October 1932. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic). URL http://www.jstor.org/stable/pdfplus/3605938.pdf.

Hartree:1932:M

[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.

Hartree:1933:DFI

[Har33b] D. R. Hartree. The dispersion formula for an ionised medium. *Nature*, 132(3346):929–930, December 16, 1933. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1933Natur.132..929H; https://www.nature.com/articles/132929a0`.

Hartree:1933:PMN

[Har33c] D. R. Hartree. A practical method for the numerical solution of differential equations. *Memoirs and Proceedings of the Manchester Literary and Philosophical Society (Manchester Memoirs)*, 77(??): 91–107, ???? ??, 1933. CODEN MPMLAQ. ISSN 0076-3721.

Hartree:1933:RCA

[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`.

Hartree:1934:AWF

[Har34a] D. R. Hartree. Approximate wave functions and atomic field for mercury. *Physical Review*, 46(8):738–743, October 1934. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `https://journals.aps.org/pr/abstract/10.1103/PhysRev.46.738; https://ui.adsabs.harvard.edu/abs/1934PhRv...46..738H`.

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`.

Hartree:1935:BSQ

[Har35a] D. R. Hartree. The bearing of statistical and quantum mechanics on school work. *Mathematical Gazette*, 22(233):73–78, May 1935. CO-

DEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic). URL https://www.jstor.org/stable/3608018.

Hartree:1935:DA

[Har35b] D. R. Hartree. The differential analyser. *Nature*, 135(3423):940–943, June 8, 1935. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL https://ui.adsabs.harvard.edu/abs/1935Natur.135..940H; https://www.nature.com/articles/135940a0.

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.

Hartree:1935:SPA

[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.

Hartree:1936:ADA

[Har36a] D. R. Hartree. The application of the differential analyser to the solution of partial differential equations. In ????, editor, *Reports of the International Congress of Mathematicians, Oslo*, pages 231–?? Gauthier-Villars, Paris, France, 1936.

Hartree:1936:TCA

[Har36b] D. R. Hartree. The theory of complex atoms. *Nature*, 138(3504): 1080–1082, December 26, 1936. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL https://www.nature.com/articles/1381080a0.

Hartree:1937:CSE

[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.

Hartree:1937:NSS

[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.

Hartree:1937:EOF

[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.

Hartree:1939:NIO

[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.

Hartree:1940:BDA

[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.

Hartree:1941:NES

[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.

Hartree:1942:CTB

[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.

Hartree:1942:MPR

[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.

Hartree:1943:PRO

[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.

Hartree:1943:TFK

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

Hartree:1946:NGC

[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 RPPHAG. 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

[Har47g] D. R. Hartree. Recent developments in calculating machines. *Journal of the Institution of Electrical Engineers, Part 2: Power Engineering*, 95(??):225–226, ???? 1947. CODEN IEJPA4. ISSN 0367-7567 (print), 2054-0590 (electronic). URL `https://momot.rs/d1/y/1692186042/124/i/scimag/2/10.1049/ji-2.1948.0059.pdf~/9nLKhh7cjPnREHZ8ysUdag/recent-developments-in-calculating-machines-7th-of--annas-archive.pdf`.

Hartree:1947:CMR

[Har47h] Douglas R. (Douglas Rayner) Hartree. *Calculating Machines: Recent and Prospective Developments and Their Impact on Mathematical Physics, Inaugural Lecture*. Cambridge University Press, Cambridge, UK, 1947. 40 pp. LCCN QA85 .H25c.

Hartree:1948:EA

[Har48a] D. R. Hartree. Experimental arithmetic. *Eureka*, ??(10):13–??, ???? ??, 1948.

Hartree:1948:HSD

[Har48b] D. R. Hartree. A historical survey of digital computing machines. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 195(1042):265–271, December 22, 1948. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic). Section on A discussion on computing machines, with contributions by M. H. A. Newman, Maurice V. Wilkes, F. C. Williams, James H. Wilkinson, and A. D. Booth.

Hartrei:1948:EEC

[Har48c] D. R. Hartreĭ. The ENIAC, an electronic computing machine. *Uspekhi Matematicheskikh Nauk (N.S.)*, 3(5(27)):146–158, 1948. ISSN 0042-1316 (print), 2305-2872 (electronic). URL `http://mathscinet.ams.org/mathscinet-getitem?mr=27182; https://www.mathnet.ru/eng/rm/v3/i5/p146; https://www.mathnet.ru/eng/rm8760`.

Hartree:1949:DAM

[Har49a] D. R. Hartree. *The Differential Analyser: Monograph*, volume 17. Ministry of Supply, Permanent Records of Research and Development, London, UK, 1949. 502–?? pp.

Hartree:1949:MCM

[Har49b] D. R. Hartree. Modern calculating machines. *Endeavour*, 8(30): ??, ???? ??, 1949. CODEN ENDEAS. ISSN 0160-9327 (print), 1873-1929 (electronic).

Hartree:1949:NSR

[Har49c] D. R. Hartree. Note on systematic roundoff errors in numerical integration. *Journal of Research of the National Bureau of Standards (1934)*, 42(1):62, January 1949. ISSN 0091-0635 (print), 2376-5305 (electronic). URL `https://nvlpubs.nist.gov/nistpubs/jres/42/jresv42n1p57_A1b.pdf`. Appendix to Harry D. Huskey, *On the Precision of a Certain Procedure of Numerical Integration*, 42(1) 57–62 (1949). Hartree shows that a small stepsize in numerical integration of a differential equation can produce biased rounding errors of the same sign that accumulate over the computation.

Hartree:1949:NIP

[Har49d] D. R. Hartree. Notes on iterative processes. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 45(2):230–236, April 1949. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1949PCPS...45..230H`. Correction: in equation (29) at the bottom of page 233, replace the denominator term $2y_0$ by $2y_1$, matching the denominator in equation (32) on page 234.

Hartree:1949:SEL

[Har49e] D. R. Hartree. *The Solution of the Equations of the Laminar Boundary Layer for Schubauer's Observed Pressure Distribution for an Elliptic Cylinder*. Number 2427. Aeronautical Research Council, Ministry of Supply, London, UK, 1949. 30 pp.

Hartree:1949:SLB

[Har49f] D. R. Hartree. *A Solution of the Laminar Boundary-layer Equation for Retarded Flow*. Number 2426. Aeronautical Research Council, Ministry of Supply, 1949. 27 pp.

Hartree:1949:TBF

[Har49g] D. R. Hartree. The tabulation of Bessel functions for large argument. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 45(4):554–557, October 1949. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1949PCPS...45..554H`.

Hartree:1949:CIM

[Har49h] Douglas R. (Douglas Rayner) Hartree. *Calculating Instruments and Machines*. University of Illinois Press, Urbana, IL, USA, 1949. ix + 138 pp. LCCN QA85 .H29.

Hartree:1949:CBA

[Har49i] Douglas R. (Douglas Rayner) Hartree. Charles Babbage and the Analytical Engine. In *Calculating Instruments and Machines* [Har49h], page ?? LCCN QA85 .H29.

Hartree:1950:ACM

[Har50a] D. R. Hartree. Automatic calculating machines. *Mathematical Gazette*, 34(310):241–252 (4 plates), December 1950. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic). Also in German translation [Har51b].

Hartree:1950:MNI

[Har50b] D. R. Hartree. A method for the numerical integration of first-order differential equations. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 46(3):523–524, July 1950. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1950PCPS...46..523H`.

Hartree:1950:SCT

[Har50c] D. R. Hartree. Some calculations of transients in an electronic valve. *Applied Scientific Research, Section B*, B1:379–390, December 1950. CODEN ASRBAC. ISSN 0365-7140 (print), 1872-8065 (electronic).

Hartree:1950:CIM

[Har50d] Douglas R. (Douglas Rayner) Hartree. *Calculating Instruments and Machines*. Cambridge University Press, Cambridge, UK, 1950. ix + 138 pp. LCCN B 4 248 631. Reprint, with minor revisions, of [Har49h].

Hartley:1951:RCI

[Har51a] H. O. Hartley. Review of *Calculating Instruments and Machines*, by D. R. Hartree. *Science Progress (1933–)*, 39(156):721–722, October 1951. CODEN SCPRAY. ISSN 0036-8504 (print), 2047-7163 (electronic). URL `http://www.jstor.org/stable/43422940`.

Hartree:1951:ARG

[Har51b] D. R. Hartree. Automatische Rechenmaschinen. (German) [Automatic calculators]. *Zeitschrift für Angewandte Mathematik und Mechanik*, 31(1–2):1–12, January/February 1951. CODEN ZAMMAX. ISSN 0044-2267 (print), 1521-4001 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1951ZaMM...31....1H`. German translation of [Har50a].

Hartree:1951:F

[Har51c] D. R. Hartree. Foreword. In Wilkes-1951-ppe [WWG51], page v. LCCN QA76.5 .W55 1951.

Hartree:1951:SUP

[Har51d] D. R. Hartree. Some unsolved problems of numerical analysis. In *Problems for the numerical analysis of the future*, number 15 in Applied Mathematics, pages 1–9. U.S. Government Printing Office,

Washington, DC, USA, 1951. One of four papers. Other contributions in the volume are by S. Lefschetz, Bernard Friedman, and George B. Dantzig.

Hartree:1952:ACM

[Har52a] D. R. Hartree. Automatic calculating machines and their potential application in the office. *Office Management Association Journal*, ??(??):??, August ??, 1952.

Hartree:1952:NA

[Har52b] D. R. Hartree. *Numerical Analysis*. Clarendon Press, Oxford, UK, 1952. xiv + 287 pp. See also second edition [Har58e].

Hartley:1953:BRN

[Har53a] H. O. Hartley. Book review: *Numerical Analysis*, by D. R. Hartree. *Journal of the Royal Statistical Society. Series A (General)*, 116(1): 92, ???? 1953. CODEN JSSAEF. ISSN 0035-9238. URL `http://www.jstor.org/stable/2980959`.

Hartree:1953:SPM

[Har53b] Douglas R. Hartree. Some practical methods of using characteristics in the calculation of non-steady compressible flow. Report AECU-2713, United States Atomic Energy Commission and Department of Mathematics, Harvard University, Oak Ridge, TN, USA and Cambridge 38, MA, USA, September 1953. ii + 44 pp. URL `https://www.osti.gov/servlets/purl/4396914`.

Hartree:1953:CIM

[Har53c] Douglas R. (Douglas Rayner) Hartree. *Calculating Instruments and Machines*. University of Illinois Press, Urbana, IL, USA, 1953. ix + 138 pp. LCCN QA85 .H29.

Hartree:1954:EDI

[Har54] D. R. Hartree. The evaluation of a diffraction integral. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 50(4):567–574, October 1954. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1954PCPS...50..567H`.

Hartree:1955:AWF

[Har55a] D. R. Hartree. Approximate wave functions, with exchange for Mn^{+2}. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 51(1):126–130, January 1955. CO-

DEN PCPSA4. ISSN 0008-1981. URL https://ui.adsabs.harvard.edu/abs/1955PCPS...51..126H.

Hartree:1955:IAW

[Har55b] D. R. Hartree. The interpolation of atomic wave functions. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 51(4):684–692, October 1955. CODEN PCPSA4. ISSN 0008-1981. URL https://ui.adsabs.harvard.edu/abs/1955PCPS...51..684H.

Hartree:1956:AWF

[Har56a] D. R. Hartree. Approximate wave functions for some atoms of the first long period. *Journal of the Optical Society of America*, 46(5): 350–353, May 1, 1956. CODEN JOSAAH. ISSN 0030-3941. URL https://opg.optica.org/josa/fulltext.cfm?uri=josa-46-5-350; https://ui.adsabs.harvard.edu/abs/1956JOSA...46..350H.

Hartree:1956:SNA

[Har56b] D. R. Hartree. Session on numerical analysis II: Introduction. *Proceedings of the IEE — Part B: Radio and Electronic Engineering*, 103(1S):149–150, April 1956. CODEN ???? ISSN 2050-2656 (print), 2054-0434 (electronic).

Hartree:1957:VAW

[Har57a] D. R. Hartree. The variation of atomic wave functions with atomic number. In *International conference on current problems in crystal physics. Massachusetts Institute of Technology, Cambridge, Mass., July 1–5*, pages 47–65. MIT Press, Cambridge, MA, USA, 1957.

Hartree:1957:CAS

[Har57b] Douglas R. Hartree. *The Calculation of Atomic Structures*. Wiley, New York, NY, USA, 1957. xiii + 181 pp. Based on lectures given under the auspices of the William Pyle Philips Fund of Haverford College, 1955.

Hartree:1958:MNI

[Har58a] D. R. Hartree. A method for the numerical integration of the linear diffusion equation. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 54(2):207–213, 1958. CODEN PCPSA4. ISSN 0008-1981. URL https://ui.adsabs.harvard.edu/abs/1958PCPS...54..207H.

Hartree:1958:NTP

[Har58b] D. R. Hartree. Numerical treatment of partial differential equations. UK National Archives papers, 1958. URL `https://discovery.nationalarchives.gov.uk/details/r/2f43117f-3d13-4825-a729-246c842cbe93`. Reference: CSAC 45.9.76/15.

Hartree:1958:RET

[Har58c] D. R. Hartree. Representation of the exchange terms in Fock's equations by a quasi-potential. *Physical Review*, 109(3):840–841, February 1958. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `https://journals.aps.org/pr/abstract/10.1103/PhysRev.109.840`; `https://ui.adsabs.harvard.edu/abs/1958PhRv..109..840H`.

Hartree:1958:VAW

[Har58d] D. R. Hartree. Variation of atomic wave functions with atomic number. *Reviews of Modern Physics*, 30(1):63–68, January 1958. CODEN RMPHAT. ISSN 0034-6861 (print), 1538-4527 (electronic), 1539-0756. URL `http://link.aps.org/doi/10.1103/RevModPhys.30.63`; `http://rmp.aps.org/abstract/RMP/v30/i1/p63_1`; `https://ui.adsabs.harvard.edu/abs/1958RvMP...30...63H`.

Hartree:1958:NA

[Har58e] Douglas R. Hartree. *Numerical Analysis*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, second edition, 1958. xvi + 302 pp. See also first edition [Har52b].

Hartree:1960:RCD

[Har60] D. R. Hartree. The radial charge densities for the Ti^{+2} argon core. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 56(2):174–175, April 1960. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1960PCPS...56..174H`.

Hartree:1984:CMRa

[Har84a] D. R. Hartree. *Calculating Machines: Recent and Prospective Developments and Their Impact on Mathematical Physics,* and *Calculating Instruments and Machines*, volume 6 of *Charles Babbage Institute Reprint Series for the History of Computing*. MIT Press, Cambridge, MA, USA, 1984. ISBN 0-262-08147-4. xvi + 40; viii + 138 + 3 pp. LCCN QA85 .H3 1984; QA76.95; QA85 .H3 1984.

With a new introduction by Maurice V. Wilkes. Reprint (1st work). Originally published: Cambridge, England: University Press, 1947. Reprint (2nd work). Originally published: Urbana: University of Illinois Press, 1949.

Hartree:1984:CMRb

[Har84b] Douglas R. Hartree. *Calculating Machines: Recent and Prospective Developments and Their Impact on Mathematical Physics, and Calculating Instruments and Machines*, volume 6 of *The Charles Babbage Institute Reprint Series for the History of Computing*. Tomash Publishers, Los Angeles, CA, USA, 1984. ISBN 0-262-08147-4. xviii + 40 and x + 138 pp. Reprint of the 1947 and 1949 originals, with an introduction by Maurice V. Wilkes.

Hartree:19xx:HDRa

[Harxxa] D. R. Hartree. Hartree, Douglas Rayner, (1897–1958), mathematical physicist: correspondence and papers. Christ's College Library archives, Cambridge University, Cambridge, UK, 19xx. URL `https://discovery.nationalarchives.gov.uk/details/r/1356458a-cf10-4e05-a140-b6e8c5a2f5c3; https://discovery.nationalarchives.gov.uk/details/r/N13830852`. Reference CSAC 45.9.76 and NRA 20490 Hartree.

Hartree:19xx:HDRf

[Harxxb] D. R. Hartree. Hartree, Douglas Rayner, (1897–1958), mathematical physicist: correspondence with E. C. Stoner (1930–1958). The Brotherton Library, University of Leeds, Woodhouse Lane, Leeds, England LS2 9JT, UK, 19xx. URL `https://discovery.nationalarchives.gov.uk/details/a/A13533122`. NRA 17735,.

Hartree:19xx:HDRe

[Harxxc] D. R. Hartree. Hartree, Douglas Rayner, (1897–1958), mathematical physicist: correspondence with Fritz London (1928–1936). William R Perkins Library, Duke University, Manuscript Department, Durham, NC 27706, USA, 19xx. URL `https://discovery.nationalarchives.gov.uk/details/a/A13531231`.

Hartree:19xx:HDRc

[Harxxd] D. R. Hartree. Hartree, Douglas Rayner, (1897–1958), mathematical physicist: correspondence with Niels Bohr (1928–1947). Niels Bohr Archive, Blegdamsvej 17, Copenhagen, Denmark, DK-2100, 19xx. URL `https://www.nbarchive.dk/`. Reference NRA 33014 NAHC.

Hartree:19xx:HDRd

[Harxxe] D. R. Hartree. Hartree, Douglas Rayner, (1897–1958), mathematical physicist: correspondence with William Hume-Rothery (1932–1934). Bodleian Library, Special Collections, Oxford University, Oxford, UK, 19xx. Reference NRA 17174.

Hartree:19xx:HDRb

[Harxxf] D. R. Hartree. Hartree, Douglas Rayner, (1897–1958), mathematical physicist: working papers. University of Manchester Library, Manchester, UK, 19xx. Reference NRA 33014 NAHC.

Hartree:19xx:ITC

[Harxxg] D. R. Hartree. Introduction and typescript: Chapters I–III of projected book on differential equations. UK National Archives papers, 19xx. URL `https://discovery.nationalarchives.gov.uk/details/r/9182e258-6bc7-4485-9657-6ef768b2ae91`.

Hartree:19xx:IWM

[Harxxh] D. R. Hartree. Introduction to wave mechanics. UK National Archives papers, 19xx. URL `https://discovery.nationalarchives.gov.uk/details/r/0174f4cc-b660-4daa-80a8-708a6bcb186f`. Drafts of uncompleted book.

Hartree:19xx:MBCb

[Harxxi] D. R. Hartree. Mechanics [book chapter draft]. UK National Archives papers, 19xx. URL `https://discovery.nationalarchives.gov.uk/details/r/857825fa-cf2e-47c6-891f-dc934f2d0027`. Reference CSAC 45.9.76/2. Chapter 2. Vectors.

Hartree:19xx:MBCc

[Harxxj] D. R. Hartree. Mechanics [book chapter draft]. UK National Archives papers, 19xx. URL `https://discovery.nationalarchives.gov.uk/details/r/97082ab8-a3f5-4086-b205-e3bfca5950f6`. Reference CSAC 45.9.76/3. Chapter 3: Kinematics of a Particle.

Hartree:19xx:MBCd

[Harxxk] D. R. Hartree. Mechanics [book chapter draft]. UK National Archives papers, 19xx. URL `https://discovery.nationalarchives.gov.uk/details/r/2d18bfb0-81a9-4e69-9da6-ad1c4fd54a0a`. Reference CSAC 45.9.76/4. Chapter 4: Laws of Motion.

Hartree:19xx:MBCe

[Harxxl] D. R. Hartree. Mechanics [book chapter draft]. UK National Archives papers, 19xx. URL `https://discovery.nationalarchives.gov.uk/details/r/dff8651f-b924-467c-8bac-afc18a321391`. Reference CSAC 45.9.76/5. Chapter 5: Special Cases of rectilinear motion of a particle.

Hartree:19xx:MBCf

[Harxxm] D. R. Hartree. Mechanics [book chapter draft]. UK National Archives papers, 19xx. URL `https://discovery.nationalarchives.gov.uk/details/r/06e21bd7-c533-4adf-8b7c-49e3a45de417`. Reference CSAC 45.9.76/6. Chapter 6: Special Motions of a Particle in Two Dimensions.

Hartree:19xx:MBCg

[Harxxn] D. R. Hartree. Mechanics [book chapter draft]. UK National Archives papers, 19xx. URL `https://discovery.nationalarchives.gov.uk/details/r/ed817b28-3a35-43ed-90b5-8f89e5691481`. Reference CSAC 45.9.76/7. Chapter 8: Localised Vectors, Moments, Vector Products.

Hartree:19xx:MBCh

[Harxxo] D. R. Hartree. Mechanics [book chapter draft]. UK National Archives papers, 19xx. URL `https://discovery.nationalarchives.gov.uk/details/r/a5c845b6-16ca-4148-87a1-47d9d1b9e7ca`. Reference CSAC 45.9.76/8. Chapter 9: Motion of a System of Particles.

Hartree:19xx:MBCi

[Harxxp] D. R. Hartree. Mechanics [book chapter draft]. UK National Archives papers, 19xx. URL `https://discovery.nationalarchives.gov.uk/details/r/db233d2c-f961-45cd-8366-9a6d79388310`. Reference CSAC 45.9.76/9. Chapter 11: The Kinematics of a Rigid Body in Two Dimensions. Later renumbered as Chapters 12 and 13.

Hartree:19xx:MBCj

[Harxxq] D. R. Hartree. Mechanics [book chapter draft]. UK National Archives papers, 19xx. URL `https://discovery.nationalarchives.gov.uk/details/r/a8f6d59d-ed7d-419d-a2d8-b481b729379d`. Reference CSAC 45.9.76/10. Chapter 12: The Dynamics of a Rigid Body in Two Dimensions.

Hartree:2012:CIM

[Har12] Douglas R. Hartree. *Calculating Instruments and Machines*. Cambridge University Press, Cambridge, UK, 2012. ISBN 1-107-63065-7 (paperback). URL https://www.cambridge.org/us/universitypress/subjects/mathematics/historical-mathematical-texts/calculating-instruments-and-machines. Reprint of [Har50d].

Hartree:1933:TIO

[HB33] D. R. Hartree and M. M. Black. A theoretical investigation of the oxygen atom in various states of ionisation. *Proceedings of the Royal Society of London. Series A, Containing Papers of a Mathematical and Physical Character*, 139(838):311–335, February 1933. ISSN 0950-1207 (print), 2053-9150 (electronic). URL http://www.jstor.org/stable/95975; https://ui.adsabs.harvard.edu/abs/1933RSPSA.139..311H.

Hartree:1936:VN

[HCM36] D. R. Hartree, S. Chapman, and E. A. Milne. Vector notation. *Mathematical Gazette*, 20(240):272–275, October 1936. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic). URL https://www.jstor.org/stable/3607781.

Hartree:1934:TCF

[HdLKP34] D. R. Hartree, R. de L. Kronig, and H. Petersen. A theoretical calculation of the fine structure of the K-absorption band of Ge in $GeCL_4$. *Physica*, 1(7–12):895–924, May 1934. CODEN PHYSAG. ISSN 0031-8914 (print), 1873-1767 (electronic). URL https://ui.adsabs.harvard.edu/abs/1934Phy.....1..895H; https://www.sciencedirect.com/science/article/abs/pii/S0031891434802844. See errata [HdLKP35].

Hartree:1935:ETC

[HdLKP35] D. R. Hartree, R. de L. Kronig, and H. Petersen. Errata: A theoretical calculation of the fine structure of the K-absorption band of Ge in $GeCL_4$. *Physica*, 2(1):144, January 1935. CODEN PHYSAG. ISSN 0031-8914 (print), 1873-1767 (electronic). URL https://ui.adsabs.harvard.edu/abs/1935Phy....2..144H. See [HdLKP34].

Hartree:1935:RCAa

[HH35a] D. R. Hartree and William Hartree. Results of calculations of atomic wave functions. III. — Results for Be, Ca and Hg. *Pro-*

ceedings of the Royal Society of London. Series A, Mathematical and physical sciences, 149(867):210–231, April 1935. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1935RSPSA.151...96H`.

Hartree:1935:SCF

[HH35b] D. R. Hartree and William Hartree. Self-consistent field, with exchange, for beryllium. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 150(869):9–33, May 1935. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1935RSPSA.150....9H`.

Hartree:1936:SCFa

[HH36a] D. R. Hartree and William Hartree. Self-consistent field, with exchange, for beryllium — II — The $(2s)(2p)$ ^{3}P and ^{1}P excited states. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 154(883):588–607, May 1936. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1936RSPSA.154..588H`.

Hartree:1936:SCFb

[HH36b] D. R. Hartree and William Hartree. Self-consistent field, with exchange, for Cl^-. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 156(887):45–62, August 1936. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1936RSPSA.156...45H`.

Hartree:1936:SCFc

[HH36c] D. R. Hartree and William Hartree. Self-consistent field, with exchange, for Cu^+. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 157(892):490–502, December 1936. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1936RSPSA.157..490H`.

Hartree:1938:SCFa

[HH38a] D. R. Hartree and William Hartree. Self-consistent field, with exchange, for calcium. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 164(917):167–191, January 21, 1938. CODEN PRLAAZ.

ISSN 0080-4630 (print), 2053-9169 (electronic). URL https://royalsocietypublishing.org/doi/10.1098/rspa.1938.0012; https://ui.adsabs.harvard.edu/abs/1938RSPSA.164..167H.

Hartree:1938:SCFb

[HH38b] D. R. Hartree and William Hartree. Self-consistent field with exchange for potassium and argon. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 166(927): 450–464, June 1938. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic). URL https://ui.adsabs.harvard.edu/abs/1938RSPSA.166..450H.

Hartree:1938:WFN

[HH38c] D. R. Hartree and William Hartree. Wave functions for negative ions of sodium and potassium. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 34(4):550–558, October 1938. CODEN PCPSA4. ISSN 0008-1981. URL https://ui.adsabs.harvard.edu/abs/1938PCPS...34..550H.

Hartree:1948:SCF

[HH48] D. R. Hartree and William Hartree. Self-consistent field, with exchange, for nitrogen and sodium. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 193(1034): 299–304, July 1948. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic). URL https://ui.adsabs.harvard.edu/abs/1948RSPSA.193..299H. Published after the death of William Hartree (in 1943).

Hartree:1940:SCFb

[HHM40a] William Hartree, D. R. Hartree, and Millard F. Manning. Self-consistent field calculations for Ge^{++} and Ge. *Physical Review*, 59 (3):306–307, February 1940. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL https://journals.aps.org/pr/abstract/10.1103/PhysRev.59.306.

Hartree:1940:SCFa

[HHM40b] William Hartree, D. R. Hartree, and Millard F. Manning. Self-consistent field calculations for Zn, Ga, Ga^{+}, Ga^{+++}, As, As^{+}, As^{++}, As^{++++}. *Physical Review*, 59(3):299–305, February 1940. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL https://journals.aps.org/pr/abstract/10.1103/PhysRev.59.299.

Hartree:1941:SCF

[HHM41] William Hartree, D. R. Hartree, and Millard F. Manning. Self-consistent field, with exchange, for Si IV and Si V. *Physical Review*, 60(12):857–865, December 1941. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `https://journals.aps.org/pr/abstract/10.1103/PhysRev.60.857`.

Hartree:1939:SCF

[HHS39] D. R. Hartree, William Hartree, and Bertha Swirles. Self-consistent field, including exchange and superposition of configurations, with some results for oxygen. *Philosophical Transactions of the Royal Society of London. Series A, Mathematical and Physical Sciences*, 238(790):229–247, July 1939. CODEN PTRMAD. ISSN 0080-4614 (print), 2054-0272 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1939RSPTA.238..229H`.

Hartree:1933:AWF

[HI33] D. R. Hartree and A. L. Ingman. An approximate wave function for the normal helium atom. *Memoirs and Proceedings of the Manchester Literary and Philosophical Society (Manchester Memoirs)*, 77 (??):69–90, ???? ??, 1933. CODEN MPMLAQ. ISSN 0076-3721.

Hartree:1938:NAD

[HI38] D. R. Hartree and John Ingham. Note on the application of the differential analyser to the calculation of train running times. *Memoirs and Proceedings of the Manchester Literary and Philosophical Society (Manchester Memoirs)*, 83(??):1–15, ???? ??, 1938. CODEN MPMLAQ. ISSN 0076-3721.

Hibbert:2019:CFF

[Hib19] Alan Hibbert. Charlotte Froese Fischer — her work and her impact. *Atoms*, 7(4):107–124, December 2019. CODEN ATOMC5. ISSN 2218-2004.

Hill:1943:OMW

[Hil43] A. V. Hill. Obituaries: Mr. William Hartree, O.B.E. *Nature*, 152 (3849):154–156, August 7, 1943. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `https://www.nature.com/articles/152154a0#citeas`.

Hartree:1939:NF

[HJ39] D. R. Hartree and S. Johnston. Note on the function $\chi(x) = \int_0^\infty \exp(-(x - w^2)^2)\,dw$. *Memoirs and Proceedings of the Manch-*

ester Literary and Philosophical Society (Manchester Memoirs), 83 (??):183–??, ???? ??, 1939. CODEN MPMLAQ. ISSN 0076-3721.

Hartree:1948:FAL

[HJ48] D. R. Hartree and S. Johnston. On a function associated with the logarithmic derivative of the gamma function. *Quarterly Journal of Mechanics and Applied Mathematics*, 1(1):29–34, January 1948. CODEN QJMMAV. ISSN 0033-5614 (print), 1464-3855 (electronic). URL `https://academic.oup.com/qjmam/article/1/1/29/1883490`.

Hartree:1947:PMS

[HMN47] D. R. Hartree, S. G. L. Michel, and P. Nicolson. Practical methods for the solution of the equations of tropospheric refraction. In *Meteorological Factors in Radio-wave Propagation: Reports on Meteorological Effect in Radio Propagation*, pages 127–168. Physical Society and Royal Meteorological Society, Great Britain, London, UK, 1947.

Hartree:1938:DAA

[HN38a] D. R. Hartree and A. K. Nuttall. The differential analyser and its applications in electrical engineering. *Journal of the Institution of Electrical Engineers*, 83(503):643–647, November 1938. CODEN JISEAL. ISSN 0368-2692 (print), 2054-0574 (electronic). URL `https://digital-library.theiet.org/content/journals/10.1049/jiee-1.1938.0179`. See comments [Ano39].

Hartree:1938:LDS

[HN38b] D. R. Hartree and A. K. Nuttall. L'analyseur différentiel et ses applications en électrotechnique. (French) [The differential analyzer and its applications in electrical engineering]. *Revue Gènèrale de l'Électricitè*, 45(??):765–771, ???? 1938. CODEN RGELAC. ISSN 0035-3116 (print), 2419-6533 (electronic).

Hartree:1948:DCM

[HNW+48] D. R. Hartree, M. H. A. Newman, Maurice V. Wilkes, F. C. Williams, James H. Wilkinson, and A. D. Booth. A discussion on computing machines. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 195(1042):265–287 (2 plates), December 22, 1948. CODEN PRLAAZ. ISSN 0962-8444 (print), 2053-9177 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1948RSPSA.195..265H`.

Holst:1994:DRH

[Hol94] P. A. Holst. Douglas R. Hartree and the mechanical differential analysers. Cite in reference 13 [Bow96, p. 13]., 1994.

Holst:1996:SRO

[Hol96] P. A. Holst. Svein Rosseland and the Oslo analyzer. *IEEE Annals of the History of Computing*, 18(4):16–26, October/December 1996. CODEN IAHCEX. ISSN 1058-6180 (print), 1934-1547 (electronic). URL `http://ieeexplore.ieee.org/iel4/85/11673/00539912.pdf; https://en.wikipedia.org/wiki/Oslo_Analyzer`.

Howlett:1959:RCA

[How59] Jack Howlett. Review of *The Calculation of Atomic Structures*, by D. R. Hartree. *Mathematical Gazette*, 43(344):152, May 1959. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic). URL `http://www.jstor.org/stable/3610241`.

Hartree:1935:COM

[HP35] D. R. Hartree and Arthur Porter. The construction and operation of a model differential analyser. *Memoirs and Proceedings of the Manchester Literary and Philosophical Society (Manchester Memoirs)*, 79(5):51–73, July 1935. CODEN MPMLAQ. ISSN 0076-3721. Reprinted in [Por36].

Hartree:1938:ADA

[HP38] D. R. Hartree and Arthur Porter. The application of the differential analyser to transients on a distortionless transmission line. *Journal of the Institution of Electrical Engineers*, 83(503):648–656, November 1938. CODEN JISEAL. ISSN 0368-2692 (print), 2054-0574 (electronic). URL `https://digital-library.theiet.org/content/journals/10.1049/jiee-1.1938.0180`. See comments [Ano39].

Hartree:1939:AAD

[HP39] D. R. Hartree and A. Porter. Application de l'analyseur différentiel à l'étude des ondes mobiles sur une ligne de transmission d'énergie sans distorsion. (French) [Application of the differential analyzer to the study of moving waves on a power transmission line without distortion]. *Revue Gènèrale de l'Électricitè*, 45(??):772–780, 1939. CODEN RGELAC. ISSN 0035-3116 (print), 2419-6533 (electronic).

Hartree:1937:TLC

[HPCS37] D. R. Hartree, Arthur Porter, A. Callender, and A. B. Stevenson. Time-lag in a control system — II. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 161 (907):460–476, August 20, 1937. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1937RSPSA.161..460H`.

Hartree:1937:ECI

[HS37] D. R. Hartree and Bertha Swirles. The effect of configuration interaction on the low terms of the spectra of oxygen. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 33(2):240–249, April 1937. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1937PCPS...33..240H`.

Hartree:19xx:MBCa

[HSxx] D. R. Hartree and Bertha Swirles. Mechanics [book chapter draft]. UK National Archives papers, 19xx. URL `https://discovery.nationalarchives.gov.uk/details/r/43c821e9-17c3-4872-bb6d-1df97266619e`. Extensively-revised manuscript and typescript drafts for projected book on 'Mechanics' in 2 vols.: 'Statics' and 'Dynamics', to be written by Hartree in collaboration with Dr. Bertha Swirles (now Lady Jeffreys) and published by Cambridge University Press. The book was not completed.

Hernandez:2021:GAC

[HVCY21] Taylor M. Hernandez, Roel Van Beeumen, Mark A. Caprio, and Chao Yang. A greedy algorithm for computing eigenvalues of a symmetric matrix with localized eigenvectors. *Numerical Linear Algebra with Applications*, 28(2):e2341:1–e2341:??, March 2021. CODEN NLAAEM. ISSN 1070-5325 (print), 1099-1506 (electronic).

Hartree:1937:MNM

[HW37] D. R. Hartree and J. R. Womersley. A method for the numerical or mechanical solution of certain types of partial differential equations. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 161(906):353–366, August 1937. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1937RSPSA.161..353H`.

Heading:1952:ORL

[HW52] J. Heading and R. T. P. Whipple. The oblique reflexion of long wireless waves from the ionosphere at the places where the Earth's magnetic field is regarded as vertical. *Philosophical Transactions of the Royal Society of London. Series A, Mathematical and Physical Sciences*, 244(887):469–503, April 1952. CODEN PTRMAD. ISSN 0080-4614 (print), 2054-0272 (electronic).

Hey:1986:QU

[HW86] Anthony J. G. Hey and Patrick Walters. *The Quantum Universe*. Cambridge University Press, Cambridge, UK, 1986. ISBN 0-521-26744-7 (hardcover), 0-521-31845-9 (paperback). vii + 180 pp. LCCN QC174.12 .H48 1987.

Hylleraas:1963:REQ

[Hyl63] Egil A. Hylleraas. Reminiscences from early quantum mechanics of two-electron atoms. *Reviews of Modern Physics*, 35(3):421–430, July 1963. CODEN RMPHAT. ISSN 0034-6861 (print), 1538-4527 (electronic), 1539-0756. URL `http://link.aps.org/doi/10.1103/RevModPhys.35.421; http://rmp.aps.org/abstract/RMP/v35/i3/p421_1`.

Hyrtl:2008:CDS

[Hyr08] Jean Hachette-Joseph Hyrtl. *Complete Dictionary of Scientific Biography*, volume 6. Charles Scribners Sons, Detroit, MI, USA, 2008. ISBN 0-684-31559-9. ??–?? pp. LCCN ????

IEEE:1993:PSP

[IEE93] IEEE, editor. *Proceedings, Supercomputing '93: Portland, Oregon, November 15–19, 1993*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1993. ISBN 0-8186-4340-4 (paperback), 0-8186-4341-2 (microfiche), 0-8186-4342-0 (hardback), 0-8186-4346-3 (CD-ROM). ISSN 1063-9535. LCCN QA76.5 .S96 1993.

Inglis:1931:ERC

[Ing31] David R. Inglis. Energy relations in complex spectra. *Physical Review*, 38(5):862–872, September 1, 1931. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `https://journals.aps.org/pr/abstract/10.1103/PhysRev.38.862`.

James:1958:LLB

[Jam58] R. W. James. [Letter] to Lawrence Bragg. UK National Archives papers, February 23, 1958. URL `https://discovery.nationalarchives.gov.uk/details/r/579cea9f-05a9-4e7d-8d3b-30deb19eea9f`. Reference W. L. Bragg/57A/91. Comments on his plan to visit England to lecture in Cambridge and Leeds. They are getting an electron microscope in the department. Arrives in England on 4 April and returns on 19 June. Plans to spend some days in London. Comments on his family. Was sad to hear of [Douglas] Hartree's death.

Jackson:1935:EEB

[JH35] J. M. Jackson and A. Howarth. Exchange of energy between diatomic gas molecules and a solid surface. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 152(877):515–529, November 1935. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Johansson:2012:IFH

[Joh12] Adam Johannes Johansson. Inga Fischer-Hjalmars (1918–2008): Swedish pharmacist, humanist, and pioneer quantum chemist. *Journal of Chemical Education*, 89(10):1274–1279, August 2012. CODEN JCEDA8. ISSN 0021-9584 (print), 1938-1328 (electronic). URL `https://pubs.acs.org/doi/10.1021/ed300024g`.

Johnson:2013:FLS

[JOK13] Calvin W. Johnson, W. Erich Ormand, and Plamen G. Krastev. Factorization in large-scale many-body calculations. *Computer Physics Communications*, 184(12):2761–2774, December 2013. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0010465513002518`.

Jones:1953:RNA

[Jon53] C. W. Jones. Review of *Numerical Analysis*, by D. R. Hartree. *Mathematical Gazette*, 37(322):309–310, December 1953. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic). URL `http://www.jstor.org/stable/3610092`.

Jones:2004:FBB

[Jon04] Allan Jones. Five 1951 BBC broadcasts on automatic calculating machines. *IEEE Annals of the History of Computing*, 26(2):3–15,

April/June 2004. CODEN IAHCEX. ISSN 1058-6180 (print), 1934-1547 (electronic). URL `http://csdl.computer.org/comp/mags/an/2004/02/a2003abs.htm; http://csdl.computer.org/dl/mags/an/2004/02/a2003.htm; http://csdl.computer.org/dl/mags/an/2004/02/a2003.pdf`.

Jeffreys:1946:MMP

[JS46] Harold Jeffreys and Bertha Swirles Jeffreys. *Methods of Mathematical Physics*. Cambridge University Press, Cambridge, UK, 1946. vii + 1 + 679 pp. LCCN QA401 .J4. URL `https://en.wikipedia.org/wiki/Bertha_Swirles; https://en.wikipedia.org/wiki/Harold_Jeffreys`.

Jeffreys:1956:MMP

[JS56] Harold Jeffreys and Bertha Swirles Jeffreys. *Methods of Mathematical Physics*. Cambridge University Press, Cambridge, UK, third edition, 1956. 714 pp. LCCN QA401 .J4 1956. URL `https://en.wikipedia.org/wiki/Bertha_Swirles; https://en.wikipedia.org/wiki/Harold_Jeffreys`.

Jeffreys:1999:MMP

[JS99] Harold Jeffreys and Bertha Swirles Jeffreys. *Methods of Mathematical Physics*. Cambridge University Press, Cambridge, UK, third edition, 1999. ISBN 0-521-66402-0 (paperback). viii + 718 pp. LCCN QA401 .J4 1999. URL `https://en.wikipedia.org/wiki/Bertha_Swirles; https://en.wikipedia.org/wiki/Harold_Jeffreys`. Reprint of [JS56].

Jackson:1944:VHF

[JSW+44] R. Jackson, R. J. Sarjant, J. B. Wagstaff, Nicholas R. Eyres, D. R. Hartree, and J. Ingham. Variable heat flow in steel. *Journal of the Iron and Steel Institute*, 150(??):211–267, ???? ??, 1944.

Jucys:1939:SCF

[Juc39] A. Jucys. Self-consistent field with exchange for carbon. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 173(952):59–67, November 1939. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

James:1928:IEZ

[JWH28] Reginald William James, Ivar Waller, and D. R. Hartree. An investigation into the existence of zero-point energy in the rock-salt lattice by an X-ray diffraction method. *Proceedings of the*

Royal Society of London. Series A, Containing Papers of a Mathematical and Physical Character, 118(779):334–350, March 1928. ISSN 0950-1207 (print), 2053-9150 (electronic). URL `http://www.jstor.org/stable/94908`.

K:1947:RCM

[K.47] R. S. K. Review of *Calculating Machines*, by D. R. Hartree. *Current Science*, 16(5):161–162, 1947. CODEN CUSCAM. ISSN 0011-3891. URL `http://www.jstor.org/stable/24210748`.

Kalamboukis:1980:DAP

[Kal80] T. Z. Kalamboukis. Davidson's algorithm with and without perturbation corrections. *Journal of Physics A (Mathematical and General)*, 13(1):57–62, January 1980. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `https://iopscience.iop.org/article/10.1088/0305-4470/13/1/008`. See comments and corrections [Dav80].

Kipping:1958:CCJ

[KB58] F. B. Kipping and W. L. Bragg. Correspondence concerning the John Humphrey Plummer Professorship of Mathematical Physics; Bragg was member of the Advisory Committee. UK National Archives papers, May 30, 1958. URL `https://discovery.nationalarchives.gov.uk/details/r/39385465-572a-4e8d-8978-eb7d6bd2a89c`. Reference W. L. Bragg/38A/133. [The] death of [D.R.] Hartree has created [a] vacancy in the Plummer Professorship. Probable that the Chair will be advertised as in "Experimental or Theoretical Physics". Asks if Bragg would serve on the Committee to advise the Council on the election.

Kelley:2020:MIG

[KBB+20] C. T. Kelley, J. Bernholc, E. L. Briggs, Steven Hamilton, Lin Lin, and Chao Yang. Mesh independence of the generalized Davidson algorithm. *Journal of Computational Physics*, 409(??):Article 109322, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120300966`.

Kuhn:1967:SHQ

[KHFA67] Thomas S. Kuhn, John L. Heilbron, Paul Forman, and Lini Allen. *Sources for History of Quantum Physics: an Inventory and Report*, volume 68 of *Memoirs of the American Philosophical Society*. American Philosophical Society, Philadelphia, PA, USA, 1967. ix +

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.

Klug:1953:KPC

[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.

Knyazev:2001:TOP

[Kny01] Andrew V. Knyazev. Toward the optimal preconditioned eigensolver: Locally optimal block preconditioned conjugate gradient method. *SIAM Journal on Scientific Computing*, 23(2):517–541, March 2001. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/36612.

Krylov:1931:NSE

[Kry31] A. N. Krylov. On the numerical solution of the equation by which, in technical matters, frequencies of small oscillations of material systems are determined. *Izvestija Akademia Nauk SSSR. Otdel. mat. i estest. nauk*, 7(4):491–539, ???? 1931. URL `http://alexei-krylov.co.tv/; http://ta.twi.tudelft.nl/users/viuk/burgers/krylov.html; http://www.encyclopedia.com/doc/1G2-2830902397.html`.

Kohn:1965:SCE

[KS65] W. Kohn and L. J. Sham. Self-consistent equations including exchange and correlation effects. *Physical Review (2)*, 140(4A): A1133–A1138, November 1965. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRev.140.A1133; http://www.nobelprize.org/nobel_prizes/chemistry/laureates/1998/`. The authors of this paper rediscover an earlier result [Gás54], and obtain the same value $\alpha = 2/3$, compared to Slater's original $\alpha = 1$ [Sla51b, Sla72].

Kaldor:2003:TCP

[KW03] Uzi Kaldor and Stephen Wilson, editors. *Theoretical Chemistry and Physics of Heavy and Superheavy Elements*, volume 11 of *Progress in theoretical chemistry and physics*. Kluwer Academic Publishers, Norwell, MA, USA, and Dordrecht, The Netherlands, 2003. ISBN 1-4020-1371-X (hardcover). xix + 565 pp. LCCN QD462.6.M36 T44 2003. URL `http://catalogue.bnf.fr/ark:/12148/cb413729685`.

L:1947:RCM

[L.47] D. H. L. Review of *Calculating Machines, Recent and Prospective Developments and their Impact on Mathematical Physics*, by D. R. Hartree. *Mathematical Tables and Other Aids to Computation*, 2 (19):316–317, July 1947. CODEN MTTCAS. ISSN 08916837. URL `http://www.jstor.org/stable/2002592`.

Lanczos:1950:IMS

[Lan50] Cornelius Lanczos. An iteration method for the solution of the eigenvalue problem of linear differential and integral operators. *Journal of Research of the National Bureau of Standards (1934)*, 45(4):255–282, October 1950. ISSN 0160-1741 (print), 2376-5259 (electronic).

Lehtola:2020:OSC

[LBV20] Susi Lehtola, Frank Blockhuys, and Christian Van Alsenoy. An overview of self-consistent field calculations within finite basis sets. *Molecules*, 25(5):1218:1–1218:23, March 2020. CODEN MOLEFW. ISSN 1420-3049. URL `https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7179435/`.

Lehmer:1966:MM

[Leh66] D. H. Lehmer. Mechanized mathematics. *Bulletin of the American Mathematical Society*, 72(5):739–750, 1966. CODEN BAMOAD. ISSN 0002-9904 (print), 1936-881x (electronic).

Leigh:1954:NSD

[Lei54] Donald C. Leigh. *Numerical Solution of a Differential Equation from Fluid Dynamics*. Ph.D. thesis, University of Cambridge, Cambridge, UK, 1954. URL `https://genealogy.math.ndsu.nodak.edu/id.php?id=140773`.

Lewis:1939:CCS

[Lew39] Clayton Roy Lewis. *Collision Cross-sections of Some Singly-excited States of Helium Using Hartree Wave Functions*. Ph.D. thesis, Brown University, Providence, RI, USA, 1939. ix + 90 pp. URL `https://www.proquest.com/pqdtglobal/docview/301807268/`.

Lin:1993:EDM

[LGGT93] H. Q. Lin, J. E. Gubernatis, Harvey Gould, and Jan Tobochnik. Exact diagonalization methods for quantum systems. *Computers in Physics*, 7(4):400–??, July 1993. CODEN CPHYE2. ISSN 0894-1866 (print), 1558-4208 (electronic). URL `https://aip.scitation.org/doi/10.1063/1.4823192`. See [Dav93].

Luthi:2017:TJE

[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).

Lindsay:1924:AMAa

[Lin24a] Robert Bruce Lindsay. *On the Atomic Models of the Alkali-metals*. Ph.D. thesis, Massachusetts Institute of Technology, Cambridge, MA, USA, 1924. URL `https://www.proquest.com/pqdtglobal/docview/301789148`.

Lindsay:1924:AMAb

[Lin24b] Robert Bruce Lindsay. On the atomic models of the alkali metals. *Journal of Mathematics and Physics (MIT)*, 3(4):191–236, May 1924. CODEN JMPHA9. ISSN 0097-1421. URL `https://onlinelibrary.wiley.com/doi/epdf/10.1002/sapm192434191`.

Lindsay:1924:U

[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].

Lindsay:1985:IARa

[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`.

Lindsay:1985:IARb

[Lin85b] Robert Bruce Lindsay. Intellectual autobiography of R. B. Lindsay: Part II. Niels Bohr Library Archive manuscript, 1985. URL `https://repository.aip.org/islandora/object/nbla:284038`.

Lindsay:1985:IARc

[Lin85c] Robert Bruce Lindsay. Intellectual autobiography of R. B. Lindsay: Part III. Niels Bohr Library Archive manuscript, 1985. URL `https://repository.aip.org/islandora/object/nbla:284266`.

Liu:1978:SEM

[Liu78] Bowen Liu. The simultaneous expansion method for the iterative solution of several of the lowest-lying eigenvalues and corresponding eigenvectors of large real-symmetric matrices. In Moler and Shavitt [MS78], pages 49–53. LCCN QD39.3.M3 W61 1978. URL `http://escholarship.org/uc/item/3xb320bq`. UC-32, CONF-780878.

Lindh:2003:BTT

[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`.

Lomax:1960:TSS

[Lom60] Ronald James Lomax. *Transient and Steady-State Space-Charge Flow*. Ph.D. thesis, University of Cambridge, Cambridge, UK, 1960. ???? pp. URL `https://genealogy.math.ndsu.nodak.edu/id.php?id=140771; https://www.proquest.com/pqdtglobal/docview/301241949`.

Longair:2016:MEL

[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`.

Lowdin:1955:EHF

[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 ????

Lowdin:1955:QTMa

[Löw55b] Per-Olov Löwdin. Quantum theory of many-particle systems. I. Physical interpretations by means of density matrices, natural spin-orbitals, and convergence problems in the method of configurational interaction. *Physical Review*, 97(6):1474–1489, March 15, 1955. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://prola.aps.org/abstract/PR/v97/i6/p1490_1`.

Lowdin:1955:QTMb

[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`.

Lowdin:1955:QTMc

[Löw55d] Per-Olov Löwdin. Quantum theory of many-particle systems. III. Extension of the Hartree–Fock scheme to include degenerate systems and correlation effects. *Physical Review*, 97(6):1509–1520, March 15, 1955. CODEN PHRVAO. ISSN 0031-899X (print),

1536-6065 (electronic). URL `http://prola.aps.org/abstract/PR/v97/i6/p1509_1`.

Lowdin:1958:GHF

[Löw58] Per-Olov Löwdin. Generalizations of the Hartree–Fock scheme. *Annales Academiae regiae scientiarum upsaliensis*, 2(??):127–135, 1958. CODEN ARUPAS. ISSN 0504-0736. URL `https://www.bokorder.se/en/books-2514/kungl-vetenskapssamhallets-i-uppsala-arsbok-2`.

Lowdin:1960:ETT

[Löw60] Per-Olov Löwdin. Expansion theorems for the total wave function and extended Hartree–Fock schemes. *Reviews of Modern Physics*, 32(2):328–334, April 1960. CODEN RMPHAT. ISSN 0034-6861 (print), 1538-4527 (electronic), 1539-0756. URL `http://link.aps.org/doi/10.1103/RevModPhys.32.328; http://rmp.aps.org/abstract/RMP/v32/i2/p328_1`.

Lowdin:1963:SDH

[Löw63] P.-O. Löwdin. I. the symmetry dilemma in the Hartree–Fock scheme. II. symmetry properties of the NSO's. III. Variation of the density matrix. Sanibel Notes., 1963.

Lykos:1963:DHF

[LPLH63] P. Lykos, G. W. Pratt, P.-O. Löwdin, and Gilda M. Harris. Discussion on "The Hartree–Fock Approximation". *Reviews of Modern Physics*, 35(3):496–501, July 1963. CODEN RMPHAT. ISSN 0034-6861 (print), 1538-4527 (electronic), 1539-0756.

Leininger:2001:SSS

[LSAS01] Matthew L. Leininger, C. David Sherrill, Wesley D. Allen, and Henry F. Schaefer III. Systematic study of selected diagonalization methods for configuration interaction matrices. *Journal of Computational Chemistry*, 22(13):1574–1589, October 2001. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).

Luzin:1931:MMK

[Luz31] N. Luzin. Sur la méthode de Mr. A. Krylov de composition de l'équation séculaire. (French) [On the method of Mr. A. Krylov for the composition of the secular equation]. *Bull. Acad. Sci. URSS*, 1931(7):903–958, 1931.

Liang:2024:TLB

[LWX24] Qigang Liang, Wei Wang, and Xuejun Xu. A two-level block preconditioned Jacobi–Davidson method for multiple and clustered eigenvalues of elliptic operators. *SIAM Journal on Numerical Analysis*, 62(2):998–1019, April 2024. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Maidment:2021:EML

[Mai21] Alison Maidment. The Edinburgh Mathematical Laboratory and Edmund Taylor Whittaker's role in the early development of numerical analysis in Britain. *Historia Mathematica*, 55(??):39–63, May 2021. CODEN HIMADS. ISSN 0315-0860 (print), 1090-249X (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0315086020300719`.

Martinez:2016:HFM

[Mar16] Jean-Philippe Martinez. The Hartree–Fock method: from self-consistency to correct symmetry. *Annalen der Physik (1900)*, 529 (1–2):1600328, December 2016. ISSN 1521-3889. See also [Mar18] for a dissertation on Fock's scientific life.

Martinez:2017:BCD

[Mar17] Jean-Philippe Martinez. Beyond computational difficulties: Survey of the two decades from the elaboration to the extensive application of the Hartree–Fock method. *Studies in History and Philosophy of Modern Physics*, 60(??):123–135, November 2017. CODEN ???? ISSN 1355-2198 (print), 1879-2502 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S1355219816301113`.

Martinez:2018:VFI

[Mar18] Jean-Philippe Martinez. *Vladimir Fock (1898–1974) : itinéraire externaliste d une pensée internaliste. Antiréductionnisme et réalisme scientifique en physique moderne. (French) [Vladimir Fock (1898–1974): externalist itinerary of an internalist thought. Antireductionism and scientific realism in modern physics].* Thèse de doctorat en Histoire et Philosophie des Sciences, Université Sorbonne Paris Cité, Paris, France, December 13, 2018. 581 pp. URL `https://theses.hal.science/tel-01953871`.

Mathew:1950:RCM

[Mat50] N. T. Mathew. Review of *Calculating Machines, Recent and Prospective Developments*, by D. R. Hartree. *Sankhyā (Indian Jour-*

nal of Statistics), 10(1–2):166, March 1950. CODEN SNKYA5. ISSN 0036-4452. URL `http://www.jstor.org/stable/25048021`.

Mayers:1957:RSC

[May57] D. F. Mayers. Relativistic self-consistent field calculation for mercury. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 241(1224):93–109, July 1957. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Mayers:1959:AAC

[May59] David Francis Mayers. *The Application of Automatic Computing to the Calculation of Atomic Structure*. Ph.D. thesis, University of Cambridge, Cambridge, UK, 1959. ???? pp. URL `https://genealogy.math.ndsu.nodak.edu/id.php?id=76337`.

Medwick:1988:DHE

[Med88] Paul A. Medwick. Douglas Hartree and early computations in quantum mechanics. *Annals of the History of Computing*, 10(2):105–111, April/June 1988. CODEN AHCOE5. ISSN 0164-1239. URL `http://dlib.computer.org/an/books/an1988/pdf/a2105.pdf; http://www.computer.org/annals/an1988/a2105abs.htm`.

Myers:1937:ESC

[MHP37] David M. Myers, D. R. Hartree, and Arthur Porter. The effect of space-charge on the secondary current in a triode. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 158(893):23–37, January 1937. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Milne:1944:RHF

[Mil44] E. A. Milne. Ralph Howard Fowler. *Journal of the London Mathematical Society*, 19(76 (Part 4)):244–256, October 1944. CODEN JLMSAK. ISSN 0024-6107 (print), 1469-7750 (electronic). Reprinted, with minor changes, in [Mil44]. See also extended version with publication list in [Mil45a].

Milne:1945:ONR

[Mil45a] E. A. Milne. Obituary notices: Ralph Howard Fowler [17 January 1889–28 July 1944]. *Monthly Notices of the Royal Astronomical Society*, 105(2):80–87, April 1945. CODEN MNRAA4. ISSN 0035-8711 (print), 1365-2966 (electronic). See also abbreviated versions [Mil44, Mil45b].

Milne:1945:RHF

[Mil45b] Edward Arthur Milne. Ralph Howard Fowler, 1889–1944. *Obituary Notices of Fellows of the Royal Society*, 5(14):60–78, November 1945. CODEN ???? ISSN 1479-571X (print), 2053-9118 (electronic). URL `http://www.jstor.org/stable/769110`. Minor changes from [Mil44]. See also extended version with publication list in [Mil45a]. See also extended version with publication list in [Mil45a].

Miri:2021:FVB

[Mir21] Johnny Miri. The fall of Vannevar Bush: The forgotten war for control of science policy in postwar America. *Historical Studies in the Natural Sciences*, 51(4):507–??, September 2021. CODEN ???? ISSN 1939-1811 (print), 1939-182X (electronic). URL `https://online.ucpress.edu/hsns/article/51/4/507/118593/The-Fall-of-Vannevar-BushThe-Forgotten-War-for`.

Massey:1936:ILN

[MM36] H. S. W. Massey and C. B. O. Mohr. The interaction of light nuclei III — the binding energies of He^4, He^5, Li^6, and of nuclei of type $4n$. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 156(889):634–654, September 1936. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Morgan:1990:DMP

[Mor90] Ronald B. Morgan. Davidson's method and preconditioning for generalized eigenvalue problems. *Journal of Computational Physics*, 89(1):241–245, July 1990. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/002199919090124J`.

Morgan:1992:GDM

[Mor92] Ronald B. Morgan. Generalizations of Davidson's method for computing eigenvalues of large nonsymmetric matrices. *Journal of Computational Physics*, 101(2):287–291, August 1992. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/002199919290006K`.

Murray:1992:IAL

[MRD92] Christopher W. Murray, Stephen C. Racine, and Ernest R. Davidson. Improved algorithms for the lowest few eigenvalues and

associated eigenvectors of large matrices. *Journal of Computational Physics*, 103(2):382–389, December 1992. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/002199919290409R`.

Massey:1936:NAI

[MS36] H. S. W. Massey and Robert Allan Smith. Negative atomic ions. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 155(886):472–489, July 1936. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Moler:1978:NAC

[MS78] Cleve B. Moler and Isaiah Shavitt, editors. *Numerical algorithms in chemistry: algebraic methods: report on the workshop, August 9–11, 1978*, LBL-8158. Lawrence Berkeley Laboratory, University of California, Berkeley, CA, USA, 1978. LCCN QD39.3.M3 W61 1978. URL `http://escholarship.org/uc/item/3xb320bq`. UC-32, CONF-780878.

Morgan:1986:GDM

[MS86] Ronald B. Morgan and David S. Scott. Generalizations of Davidson's method for computing eigenvalues of sparse symmetric matrices. *SIAM Journal on Scientific and Statistical Computing*, 7(3): 817–825, July 1986. CODEN SIJCD4. ISSN 0196-5204.

Morgan:1993:PLA

[MS93] Ronald B. Morgan and David S. Scott. Preconditioning the Lanczos algorithm for sparse symmetric eigenvalue problems. *SIAM Journal on Scientific Computing*, 14(3):585–593, May 1993. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic).

Meyer-Spasche:2011:OBE

[MS11] Rita Meyer-Spasche. Oscar Buneman und die Entwicklung von Teilchen-Methoden. (German) [Oscar Buneman and the development of particle methods]. In *Festkolloquium "Rudolf Gorenflo: Fluide aus fraktionaler Sicht", Hans Gebeleins Turbulenz aus stochastischer Sicht, Wellen von Korteweg und de Vries, zelluläre Diffusion u.a* [GGG11], pages 86–99. ISBN 3-940170-19-4. LCCN ???? URL `https://www.math.berlin/publikationen/forumbaende.html`.

Meyer-Spasche:2014:COB

[MS14] Rita Meyer-Spasche. Cosmopolitan Oscar Buneman (1913–1993): his serpentine path from Milan to Stanford. *Almagest: International Journal for the History of Scientific Ideas*, 5(2):26–39, 2014. CODEN ???? ISSN 1792-2593. URL `https://www.brepolsonline.net/doi/epdf/10.1484/J.ALMAGEST.5.103565`.

Meyer-Spasche:2016:PPO

[MSN16] Rita Meyer-Spasche and Rolf Tomas Nossum. Persecution and patronage: Oscar Buneman's years in Britain. *Almagest: International Journal for the History of Scientific Ideas*, 7(2):4–21, 2016. ISSN 1792-2593. URL `https://pure.mpg.de/rest/items/item_2403602/component/file_2403630/content; https://www.brepolsonline.net/doi/10.1484/J.ALMAGEST.5.112684`.

Mulliken:1957:RCA

[Mul57] Robert S. Mulliken. Review of *The Calculation of Atomic Structures. Based on Lectures Given Under the Auspices of the William Pyle Fund of Haverford College, 1955*, by D. R. Hartree. *Science*, 126(3275):656–657, October 4, 1957. CODEN SCIEAS. ISSN 0036-8075 (print), 1095-9203 (electronic). URL `http://www.jstor.org/stable/1753033`.

Massey:1938:SSD

[MWBS38] H. S. W. Massey, J. Wylie, R. A. Buckingham, and R. Sullivan. A small scale differential analyser: Its construction and operation. *Proceedings of the Royal Irish Academy, Section A: Mathematical and Physical Sciences*, 45:1–21, October 4, 1938. CODEN PRIAAK. ISSN 0035-8975. URL `https://www.jstor.org/stable/20490736`.

Nash:1990:HSC

[Nas90] Stephen G. Nash, editor. *A History of Scientific Computing*. ACM Press history series. Addison-Wesley and ACM Press, Addison-Wesley and New York, NY 10036, USA, 1990. ISBN 0-201-50814-1. xix + 359 pp. LCCN QA76.17 .H59 1990.

Nesbet:1955:CIO

[Nes55a] R. K. Nesbet. Configuration interaction in orbital theories. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 230(1182):312–321, June 1955. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Nesbet:1955:EES

[Nes55b] R. K. Nesbet. Excited electronic states of 1, 3-butadiene. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 230(1182):322–330, June 1955. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Nesbet:1965:ADL

[Nes65] R. K. Nesbet. Algorithm for diagonalization of large matrices. *Journal of Chemical Physics*, 43(1):311–312, ???? 1965. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). See modification [Sha70].

Nuttall:1936:RNL

[NHP36] A. K. Nuttall, D. R. Hartree, and Arthur Porter. The response of a non-linear electric circuit to an impulse. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 32(2):304–320, May 1936. CODEN PCPSA4. ISSN 0008-1981.

Nicolson:1962:FTM

[Nic62] Malcolm Macleod Nicolson. *Fundamentals and Techniques of Mathematics for Scientists*. Wiley, New York, NY, USA, 1962. xx + 526 pp. LCCN QA37 .N5 1961. Substantially edited, and completed, by Douglas R Hartree and Daphne G. Padfield, following the accidental death of Malcolm Macleod (M. M.) Nicolson. For more on that sad event, see `https://mathshistory.st-andrews.ac.uk/Biographies/Nicolson/`.

Nicolson:1946:TPT

[nLN46] Phyllis (née Lockett) Nicolson. *Three Problems in Theoretical Physics*. Ph.D. thesis, Victoria University of Manchester, Manchester, UK, 1946. 192 (some unnumbered figures) pp. URL `https://dbpedia.org/page/Phyllis_Nicolson; https://en.wikipedia.org/wiki/Phyllis_Nicolson; https://mathshistory.st-andrews.ac.uk/Biographies/Nicolson/; https://www.proquest.com/pqdtglobal/docview/2277490510`.

Olsen:1990:POB

[OJS90] Jeppe Olsen, Poul Jørgensen, and Jack Simons. Passing the one-billion limit in full configuration-interaction (FCI) calculations. *Chemical Physics Letters*, 169(6):463–472, June 1990. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic).

URL https://www.sciencedirect.com/science/article/abs/pii/000926149085633N.

OConnor:2006:VAF

[OR06] J. J. O'Connor and E. F. Robertson. Vladimir Aleksandrovich Fock. MacTutor Web site, November 2006. URL https://mathshistory.st-andrews.ac.uk/Biographies/Fock/.

Owens:1986:VBD

[Owe86] Larry Owens. Vannevar Bush and the differential analyzer: The text and context of an early computer. *Technology and Culture*, 27(1):63–95, January 1986. CODEN TECUA3. ISSN 0040-165X (print), 1097-3729 (electronic). URL https://www.jstor.org/stable/3104945.

Owens:1994:CMS

[Owe94] Larry Owens. The counterproductive management of science in the Second World War: Vannevar Bush and the Office of Scientific Research and Development. *Business History Review*, 68(4):515–576, Winter 1994. ISSN 0007-6805 (print), 2044-768X (electronic). URL https://www.jstor.org/stable/3117197.

Phillips:1963:BRF

[Phi63] Melba Phillips. Book review: *Fundamentals and Techniques of Mathematics for Scientists*, by M. M. Nicolson. *American Journal of Physics*, 31(2):146, February 1963. CODEN AJPIAS. ISSN 0002-9505 (print), 1943-2909 (electronic). URL https://pubs.aip.org/aapt/ajp/article/31/2/146/1046715/Fundamentals-and-Techniques-of-Mathematics-for. See [Nic62].

Phillips:1979:WLB

[Phi79] David Chilton Phillips. William Lawrence Bragg, 31 March 1890–1 July 1971. *Biographical Memoirs of Fellows of the Royal Society*, 25:74–143, November 1979. CODEN BMFRA3. ISSN 0080-4606 (print), 1748-8494 (electronic). URL https://doi.org/10.1098/rsbm.1979.0003.

Parrish:2016:BBD

[PHM16] Robert M. Parrish, Edward G. Hohenstein, and Todd J. Martínez. "Balancing" the block Davidson–Liu algorithm. *Journal of Chemical Theory and Computation*, 12(7):3003–3007, July 12, 2016. CODEN JCTCCE. ISSN 1549-9618 (print), 1549-9626 (electronic).

Porter:1936:DAS

[Por36] Arthur Porter. *The Differential Analyser and Some Applications*. Ph.D. thesis, The Victoria University of Manchester, Manchester, UK, October 1936. vii + 364 pp. URL `https://www.proquest.com/pqdtglobal/docview/301194398/`.

Pratt:1952:WFE

[Pra52] George W. Pratt, Jr. Wave functions and energy levels for Cu^+ as found by the Slater approximation to the Hartree–Fock equations. *Physical Review (2)*, 88(6):1217–1224, December 15, 1952. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://prola.aps.org/abstract/PR/v88/i6/p1217_1`.

Priestley:2010:SOM

[Pri10] Mark Priestley. *A Science of Operations: Machines, Logic and the Invention of Programming*. History of computing. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2010. ISBN 1-84882-554-4 (hardcover), 1-84882-555-2 (e-book). ix + 341 pp. LCCN QA76.6 .P737 2010.

Pollock:2021:EAA

[PS21] Sara Pollock and L. Ridgway Scott. Extrapolating the Arnoldi algorithm to improve eigenvector convergence. *arXiv.org*, ??(??), March 21, 2021. 2103.08635.

Pang:2024:DBC

[PY24] Qiyuan Pang and Haizhao Yang. A distributed block Chebyshev–Davidson algorithm for parallel spectral clustering. *Journal of Scientific Computing*, 98(3):??, March 2024. CODEN JSCOEB. ISSN 0885-7474 (print), 1573-7691 (electronic). URL `https://link.springer.com/article/10.1007/s10915-024-02455-y`.

Pyykko:1988:RES

[Pyy88] Pekka Pyykkö. Relativistic effects in structural chemistry. *Chemical Reviews*, 88(3):563–594, May 1988. CODEN CHREAY. ISSN 0009-2665 (print), 1520-6890 (electronic). URL `https://pubs.acs.org/doi/abs/10.1021/cr00085a006`.

Rutherford:1929:DSA

[RAC+29] Sir Ernest Rutherford, F. W. (Francis William) Aston, James Chadwick, C. D. (Charles Drummond) Ellis, George Gamow, Ralph Howard Fowler, Owen W. Richardson, and Douglas R.

Hartree. Discussion on the structure of atomic nuclei. *Proceedings of the Royal Society of London. Series A, Containing Papers of a Mathematical and Physical Character*, 123(792):373–390, April 6, 1929. CODEN PRLAAZ. ISSN 0950-1207 (print), 2053-9150 (electronic). URL `http://www.jstor.org/stable/pdfplus/95202.pdf`.

Rose:1937:ENS

[RB37a] M. E. Rose and H. A. Bethe. Erratum: Nuclear Spins and Magnetic Moments in the Hartree Model (Phys. Rev. **51**, 2051937). *Physical Review*, 51(11):993, June 1, 1937. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://prola.aps.org/abstract/PR/v51/i11/p993_2`. See [RB37b].

Rose:1937:NSM

[RB37b] M. E. Rose and H. A. Bethe. Nuclear spins and magnetic moments in the Hartree model. *Physical Review*, 51(3):205–213, February 1, 1937. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://prola.aps.org/abstract/PR/v51/i3/p205_1`. See erratum [RB37a].

Rappoport:2023:LMO

[RBM+23] Dmitrij Rappoport, Samuel Bekoe, Luke Nambi Mohanam, Scott Le, Naje' George, Ziyue Shen, and Filipp Furche. `Libkrylov`: a modular open-source software library for extremely large on-the-fly matrix computations. *Journal of Computational Chemistry*, 44 (11):1105–1118, April 30, 2023. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).

Reinhold:1974:DVB

[Rei74] Robert Reinhold. Dr. Vannevar Bush is dead at 84: Dr. Vannevar Bush, who marshaled nation's wartime technology and ushered in atomic age, is dead at 84 son of a minister; an abiding optimism; five arduous years; 60-year career; equipment outdated companies; successful award from A.E.C.; secret work on U-235. *New York Times*, ??(??):1, 36, June 30, 1974. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL `https://www.proquest.com/hnpnewyorktimes/docview/120125242/`.

Reiher:2005:RQC

[Rei05] M. Reiher. *Relativistic Quantum Chemistry: the Fundamental Theory of Molecular Science*. Wiley-VCH, Weinheim, Germany, 2005.

ISBN 3-527-31292-7 (hardcover), 3-527-62749-9 (e-book). xix + 669 pp. LCCN QD462.6.R42 .R454 2009.

Rettrup:1982:IMC

[Ret82] Sten Rettrup. An iterative method for calculating several of the extreme eigensolutions of large real non-symmetric matrices. *Journal of Computational Physics*, 45(1):100–107, January 1982. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0021999182901048`. See [Dav75].

Ridley:1956:SSA

[Rid56] E. Cecily Ridley. *Some Studies in Atomic Structure*. Ph.D. thesis, University of Cambridge, Newnham College, Cambridge, UK, 1956. ???? pp. URL `https://www.proquest.com/pqdtglobal/docview/301279118`.

Roos:2016:MQC

[RLM+16] Björn O. Roos, Roland Lindh, Per Åke Malmqvist, Valera Veryazov, and Per-Olof Widmark. *Multiconfigurational Quantum Chemistry*. Wiley, New York, NY, USA, 2016. ISBN 0-470-63346-8 (hardcover), 1-119-27787-6 (ePub e-book), 1-119-27787-6 (PDF e-book), 1-119-27788-4 (e-book) (e-book). xiv + 224 pp. LCCN QD462 .R66 2016.

Roos:1994:IIF

[Roo94] Björn Roos. Introduction: Inga Fischer-Hjalmars. *Theoretica Chimica Acta*, 87(4–5):243–245, January 1994. CODEN TCHAAM. ISSN 0040-5744. URL `https://link.springer.com/article/10.1007/BF01113381`.

Rosseland:1937:ODN

[Ros37] Svein Rosseland. Om differensialanalysatoren. (Norwegian) [On the differential analyzer]. *Norsk Matematisk Tidsskrift*, 19(1–4):134–138, ???? 1937. ISSN 2387-2187. URL `https://articles.adsabs.harvard.edu/full/seri/QJRAS/0027/0000512.000.html`.

Rosenhead:1963:LBL

[Ros63] Louis Rosenhead, editor. *Laminar Boundary Layers; an Account of the Development, Structure, and Stability of Laminar Boundary Layers in Incompressible Fluids, Together with a Description of the Associated Experimental Techniques*. Clarendon Press, Oxford, UK, 1963. xxi + 687 + 1 + 1 pp. LCCN QC151 .R58. Written

by L. F. Crabtree, G. E. Gadd, N. Gregory, C. R. Illingworth, C. W. Jones, D. Küchemann, M. J. Lighthill, R. C. Pankhurst, L. Rosenhead (Editor), L. Sowerby, J. T. Stuart, E. J. Watson, and G. B. Whitham. See also reprint [Ros88].

Rosenhead:1988:LBL

[Ros88] Louis Rosenhead, editor. *Laminar Boundary Layers: an Account of the Development, Structure and Stability of Laminar Boundary Layers in Incompressible Fluids, Together with a Description of the Associated Experimental Techniques*. Dover Publications, Inc., New York, NY, USA, 1988. ISBN 0-486-65646-2 (paperback). xxi + 687 + 1 + 1 pp. LCCN QC151 .R58 1988. Reprint of [Ros63].

Reiher:2015:RQC

[RW15] Markus Reiher and Alexander Wolf. *Relativistic Quantum Chemistry: the Fundamental Theory of Molecular Science*. Wiley-VCH Verlag GmbH and Co. KGaA, Weinheim, Germany, second edition, 2015. ISBN 3-527-33415-7 (hardcover), 3-527-66755-5 (oBook), 3-527-66756-3 (Mobi), 3-527-66757-1 (ePDF), 3-527-66758-X (ePub). xxv + 737 pp. LCCN QD462.6.R42. URL `http://onlinelibrary.wiley.com/book/10.1002/9783527667550`.

Saad:2011:NML

[Saa11] Youcef Saad. *Numerical Methods for Large Eigenvalue Problems*, volume 66 of *Classics in applied mathematics*. SIAM Press, Philadelphia, PA, USA, second edition, 2011. ISBN 1-61197-072-5. xv + 276 pp. LCCN QA188 .S18 2011. URL `http://www.cs.umn.edu/~saad/eig_book_2ndEd.pdf`.

Sadkane:1989:ANM

[Sad89] M. Sadkane. *Analyse numérique de la méthode de Davidson*. Ph.D. thesis, UER mathématiques et Informatique, l'université de Rennes, Rennes, France, 1989. See [Dav75].

Shao:2018:ANC

[SAY+18] Meiyue Shao, H. Metin Aktulga, Chao Yang, Esmond G. Ng, Pieter Maris, and James P. Vary. Accelerating nuclear configuration interaction calculations through a preconditioned block iterative eigensolver. *Computer Physics Communications*, 222(??): 1–13, January 2018. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0010465517302904`.

Sleijpen:1996:JDT

[SBFV96] Gerard L. G. Sleijpen, Albert G. L. Booten, Diederik R. Fokkema, and Henk A. Van der Vorst. Jacobi–Davidson type methods for generalized eigenproblems and polynomial eigenproblems. *BIT Numerical Mathematics*, 36(3):595–633, September 1996. CODEN BITTEL, NBITAB. ISSN 0006-3835 (print), 1572-9125 (electronic). URL `http://www.mai.liu.se/BIT/contents/bit36.html; http://www.springerlink.com/openurl.asp?genre=article&issn=0006-3835&volume=36&issue=3&spage=595`. International Linear Algebra Year (Toulouse, 1995).

Shavitt:1973:ICS

[SBPH73] I. Shavitt, C. F. Bender, A. Pipano, and R. P. Hosteny. The iterative calculation of several of the lowest or highest eigenvalues and corresponding eigenvectors of very large symmetric matrices. *Journal of Computational Physics*, 11(1):90–108, January 1973. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0021999173901496`.

Scott:1945:IPR

[Sco45] R. A. Scott. An investigation of the performance of the Rayleigh disk. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 183(994):296–316, February 1945. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Senior:1952:DSI

[Sen52] T. B. A. Senior. Diffraction by a semi-infinite metallic sheet. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 213(1115):436–458, July 1952. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Stathopoulos:1993:RSP

[SF93] Andreas Stathopoulos and Charlotte Froese Fischer. Reducing synchronization on the parallel Davidson method for the large, sparse, eigenvalue problem. In IEEE [IEE93], pages 172–180. ISBN 0-8186-4340-4 (paperback), 0-8186-4341-2 (microfiche), 0-8186-4342-0 (hardback), 0-8186-4346-3 (CD-ROM). ISSN 1063-9535. LCCN QA76.5 .S96 1993.

Stathopoulos:1994:DPF

[SF94] Andreas Stathopoulos and Charlotte Froese Fischer. A Davidson program for finding a few selected extreme eigenpairs of a

large, sparse, real, symmetric matrix. *Computer Physics Communications*, 79(2):268–290, April 1994. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0010465594900736`.

Simoes:2000:QCG

[SG00] Ana Simões and Kostas Gavroğlu. Quantum chemistry in Great Britain: Developing a mathematical framework for quantum chemistry. *Studies in History and Philosophy of Modern Physics*, 31(4): 511–548, December 2000. CODEN ???? ISSN 1355-2198 (print), 1879-2502 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S135521980000023X`.

Shannon:1941:MTD

[Sha41] Claude E. Shannon. Mathematical theory of the differential analyzer. *Journal of Mathematics and Physics (MIT)*, 20(1–4):337–354, April 1941. CODEN JMPHA9. ISSN 0097-1421.

Shavitt:1970:MNA

[Sha70] Isaiah Shavitt. Modification of Nesbet's algorithm for the iterative evaluation of eigenvalues and eigenvectors of large matrices. *Journal of Computational Physics*, 6(1):124–130, August 1970. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0021999170900100`. See [Nes65].

Shavitt:1978:MEP

[Sha78] Isaiah Shavitt. Matrix eigenvalue problem. In Moler and Shavitt [MS78], pages 7–10. LCCN QD39.3.M3 W61 1978. URL `http://escholarship.org/uc/item/3xb320bq`. UC-32, CONF-780878.

Shavitt:1998:HEC

[Sha98] Isaiah Shavitt. The history and evolution of configuration interaction. *Molecular Physics*, 94(1):3–17, May 1998. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic). URL `https://www.tandfonline.com/doi/abs/10.1080/002689798168303`.

Siegbahn:2011:BRM

[SL11] Per Siegbahn and Roland Lindh. Björn O. Roos: 1937–2010. Mentor, colleague, innovator. *International Journal of Quantum Chemistry*, 111(13):3256–3259, November 5, 2011. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Slater:1929:TCS

[Sla29] J. C. Slater. The theory of complex spectra. *Physical Review (2)*, 34(10):1293–1322, November 15, 1929. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://prola.aps.org/abstract/PR/v34/i10/p1293_1`.

Slater:1930:NHM

[Sla30] J. C. Slater. Note on Hartree's method. *Physical Review (2)*, 35 (2):210–211, January 15, 1930. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://prola.aps.org/abstract/PR/v35/i2/p210_2`.

Slater:1951:MEH

[Sla51a] J. C. Slater. Magnetic effects and the Hartree–Fock equation. *Physical Review (2)*, 82(4):538–541, May 15, 1951. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://prola.aps.org/abstract/PR/v82/i4/p538_1`.

Slater:1951:SHF

[Sla51b] J. C. Slater. A simplification of the Hartree–Fock method. *Physical Review (2)*, 81(3):385–390, February 1, 1951. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://prola.aps.org/abstract/PR/v81/i3/p385_1`.

Slater:1972:SEC

[Sla72] John C. Slater. Statistical exchange-correlation in the self-consistent field. *Advances in Quantum Chemistry*, 6:1–92, 1972. CODEN AQCHA9. ISSN 0065-3276. URL `http://www.sciencedirect.com/science/article/pii/S0065327608605419`.

Simon:2010:BHCb

[SLG+10] D. H. Simon, Y. Y. Lau, R. M. Gilgenbach, W. Tang, B. Hoff, K. L. Cartwright, and John W. Luginsland. Buneman–Hartree condition re-visited. In *2010 Abstracts IEEE International Conference on Plasma Science*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, June 2010. URL `https://ieeexplore.ieee.org/document/5533892`.

Simon:2010:BHCa

[SLT+10] David H. Simon, Y. Y. Lau, Wilkin Tang, Keith Cartwright, Brad Hoff, R. M. Gilgenbach, and John W. Luginsland. 21.5: Buneman–Hartree condition revisited. In *2010 IEEE International Vacuum*

Electronics Conference (IVEC). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, May 2010.

Small:2001:AAE

[Sma01] James S. Small. *The Analogue Alternative: the Electronic Analogue Computer in Britain and the USA, 1930–1975*, volume 15 of *Studies in the history of science technology and medicine*. Routledge, London, UK and New York, NY, USA, 2001. ISBN 0-415-27119-3 (hardcover), 0-203-77021-8 (e-book), 0-415-86299-X, 1-134-69902-6 (e-book), 1-134-69909-3 (e-book), 1-134-69916-6 (e-book). xiv + 322 pp. LCCN QA76.17 .S55 2001. URL `http://sfx.ethz.ch/sfx_locater?sid=ALEPH:EBI01\%26genre=book%26isbn=9780203770214`.

Smith:1990:MCA

[Smi90] Meg Weston Smith. E. A. Milne and the creation of air defence: some letters from an unprincipled brigand, 1916–1919. *Notes and Records of the Royal Society of London*, 44(2):241–255, July 1990. CODEN NOREAY. ISSN 0035-9149 (print), 1743-0178 (electronic).

Shepard:2002:RCE

[SSL02] Ron Shepard, Isaiah Shavitt, and Hans Lischka. Reducing I/O costs for the eigenvalue procedure in large-scale configuration interaction calculations. *Journal of Computational Chemistry*, 23(11):1121–1125, August 2002. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).

Stevenson:1937:GES

[Ste37] A. F. Stevenson. A generalization of the equations of the self-consistent field for two-electron configurations. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 160(903):588–604, June 15, 1937. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Stevenson:1939:MIC

[Ste39] A. F. Stevenson. A method for improved calculation of energies of two-electron configurations from Hartree functions application to $2p^2$ in O III. *Physical Review*, 56(6):586–593, September 1939. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `https://journals.aps.org/pr/abstract/10.1103/PhysRev.56.586`.

Stewartson:1949:CIC

[Ste49] K. Stewartson. Correlated incompressible and compressible boundary layers. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 200(1060):84–100, December 1949. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Sumner:2014:DCV

[Sum14] James Sumner. Defiance to compliance: Visions of the computer in postwar Britain. *History and Technology*, 30(4):309–333, 2014. CODEN HITEE8. ISSN 0734-1512 (print), 1477-2620 (electronic).

Sleijpen:2000:JDI

[SV00] Gerard L. G. Sleijpen and Henk A. Van der Vorst. A Jacobi–Davidson iteration method for linear eigenvalue problems. *SIAM Review*, 42(2):267–293, June 2000. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36308`.

Swirles:1926:PAC

[Swi26] Bertha Swirles. The polarisabilities of atomic cores. *Mathematical proceedings of the Cambridge Philosophical Society*, 23(4):403–411, October 1926. CODEN MPCPCO. ISSN 0305-0041 (print), 1469-8064 (electronic).

Swirles:1928:SAT

[Swi28] Bertha Swirles. *Some Applications of the Theory of Perturbations in the Quantum Mechanics*. Ph.D. dissertation, Faculty of Mathematics, University of Cambridge, Cambridge, UK, 1928. ???? pp. URL `https://www.proquest.com/pqdtglobal/docview/1779976109`.

Swirles:1935:RSC

[Swi35] Bertha Swirles. The relativistic self-consistent field. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 152(877):625–649, November 1935. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic). See [Har47b, p. 143] for corrections and additions.

Swirles:1936:RIT

[Swi36] Bertha Swirles. The relativistic interaction of two electrons in the self-consistent field method. *Proceedings of the Royal Society of*

London. Series A, Mathematical and physical sciences, 157(892): 680–696, December 1936. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

SwirlesJeffreys:1987:DRH

[Swi87] Lady Bertha Swirles Jeffreys. Douglas Rayner Hartree (1897–1958). *Comments on Atomic and Molecular Physics*, 20(??):189–198, ???? 1987. CODEN CAMPBS. ISSN 0010-2687.

Shepard:2001:SPA

[SWTM01] Ron Shepard, Albert F. Wagner, Jeffrey L. Tilson, and Michael Minkoff. The subspace projected approximate matrix (SPAM) modification of the Davidson method. *Journal of Computational Physics*, 172(2):472–514, September 20, 2001. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999101968287`.

Tamm:1932:AEM

[TB32] Ig. (Igor Yevgenyevich) Tamm and D. Blochinzev. Über die Austrittsarbeit der Elektronen aus Metallen. (German) [On the work function of electrons from metals]. *Zeitschrift für Physik*, 77(11–12):774–777, November 1932. CODEN ZEPYAA. ISSN 0044-3328. This paper is claimed [Mar16, p. 6] to be the first to contain the term "Hartree–Fock method". ("Hartree–Focksche Verfahren" in the original German).

Temperley:1949:SMP

[Tem49] H. N. V. Temperley. Statistical mechanics and the partition of numbers I. The transition of liquid helium. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 199 (1058):361–375, November 1949. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Temperley:1950:SMT

[Tem50] H. N. V. Temperley. Statistical mechanics of the two-dimensional assembly. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 202(1069):202–207, July 1950. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Thatcher:1939:CWF

[Tha39] W. A. Thatcher. Calculated wave functions and energy values for x-ray terms of potassium. *Proceedings of the Royal Society of London.*

Series A, Mathematical and physical sciences, 172(949):242–263, August 1939. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Thomson:1963:CGD

[Tho63] George Paget Thomson. Charles Galton Darwin, 1887–1962. *Biographical Memoirs of Fellows of the Royal Society*, 9:69–85, November 1963. CODEN BMFRA3. ISSN 0080-4606 (print), 1748-8494 (electronic).

Tinkham:1964:GTQ

[Tin64] Michael Tinkham. *Group Theory and Quantum Mechanics*. McGraw-Hill, New York, NY, USA, 1964. xii + 340 pp. LCCN QC174.5 .T589 1964.

Truell:1959:RCA

[Tru59] Rohn Truell. Review of *The calculation of atomic structures*, by D. R. Hartree. *Quarterly of Applied Mathematics*, 17(2):221, July 1959. CODEN QAMAAY. ISSN 0033-569X (print), 1552-4485 (electronic). URL `http://www.jstor.org/stable/43634937`.

Umar:1989:MDA

[UF89] Verena Meiser Umar and Charlotte Froese Fischer. Multitasking the Davidson algorithm for the large, sparse eigenvalue problem. *The International Journal of Supercomputer Applications*, 3(4):28–53, December 1989. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208900300404`.

Ullrich:1952:BCI

[Ull52] Egon Ullrich. Besprechung: *Calculating Instruments and Machines*, von D. R. Hartree. *Zeitschrift für Naturforschung Teil A: Astrophysik, Physik, und Physikalische Chemie*, 7:448, January 1952. CODEN ZENAAU. ISSN 0044-3166. URL `https://ui.adsabs.harvard.edu/abs/1952ZNatA...7..448H; https://www.degruyter.com/document/doi/10.1515/zna-1952-0613/html`.

Unsold:1926:TSG

[Uns26] Albrecht Unsöld. Über die Termgroß en der Serienspektren. (German) [On the term sizes of the series spectra]. *Zeitschrift für Physik*, 36(2):92–100, February 1926. CODEN ZEPYAA.

ISSN 0044-3328. URL https://link.springer.com/article/10.1007/BF01380126.

Unz:1966:DBQ

[Unz66] H. Unz. On the derivation of Booker's quartic from Appleton–Hartree equation. *Proceedings of the IEEE*, 54(2):304, February 1966. CODEN IEEPAD. ISSN 0018-9219 (print), 1558-2256 (electronic).

Vajda:1951:RCI

[Vaj51] S. Vajda. Review of *Calculating Instruments and Machines*, by D. R. Hartree. *Mathematical Gazette*, 35(311):71–72, February 1951. CODEN MAGAAS. ISSN 00255572. URL http://www.jstor.org/stable/3610576.

VanderKloot:2011:MSV

[Van11] William Van der Kloot. Mirrors and smoke: A. V. Hill, his brigands, and the science of anti-aircraft gunnery in World War I. *Notes and Records of the Royal Society of London*, 65(4):393–410, July 2011. CODEN NOREAY. ISSN 0035-9149 (print), 1743-0178 (electronic).

Veselov:1975:PVA

[VKL75] M. G. Veselov, P. L. Kapitza, and M. A. Leontovich. Personalia: Vladimir Aleksandrovich Fock (obituary). *Soviet Physics. Uspekhi*, 18(10):840–841, October 1975. CODEN SOPUAP. ISSN 0038-5670 (print), 2169-5296 (electronic). URL https://iopscience.iop.org/article/10.1070/PU1975v018n10ABEH005231/pdf. Original Russian version in Uspekhi Fizicheskikh Nauk **117**, 375–376 (October 1975).

Walmsley:2000:OLJ

[Wal00] Mary Walmsley. Obituary: Lady Jeffreys 1903–1999. *Mathematical Gazette*, 84(500):321–323, 2000. CODEN MAGAAS. ISSN 00255572. URL http://www.jstor.org/stable/3621681.

Waide:2020:BPS

[WGG20] D. T. Waide, D. G. Green, and G. F. Gribakin. BSHF: a program to solve the Hartree–Fock equations for arbitrary central potentials using a B-spline basis. *Computer Physics Communications*, 250 (??):Article 107112, May 2020. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0010465519304187.

Waller:1929:ITS

[WH29] Ivar Waller and D. R. Hartree. On the intensity of total scattering of X-rays. *Proceedings of the Royal Society of London. Series A, Containing Papers of a Mathematical and Physical Character*, 124(793):119–142, May 1929. ISSN 0950-1207 (print), 2053-9150 (electronic).

Wheeler:1950:POI

[Whe50] David John Wheeler. Programme organization and initial orders for the EDSAC. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 202(1071):573–589, August 1950. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic).

Williams:1937:RSC

[Wil37] Arthur Olney Williams, Jr. *A Relativistic Self-Consistent Field for Copper*. Ph.D. thesis, Brown University, Providence, RI, USA, October 1937. vi + 86 pp. URL `https://www.proquest.com/pqdtglobal/docview/301791656`. See also [Wil40].

Williams:1940:RSC

[Wil40] A. O. (Arthur Olney) Williams, Jr. A relativistic self-consistent field for Cu^+. *Physical Review*, 58(8):723–726, October 1940. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `https://journals.aps.org/pr/abstract/10.1103/PhysRev.58.723`. See also thesis [Wil37].

Williams:1953:TES

[Wil53] A. O. (Arthur Olney) Williams, Jr. Two-electron self-consistent field. *Physical Review*, 90(5):803–807, June 1953. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic).

Wilkes:1958:OPD

[Wil58] M. V. Wilkes. [Obituary:] Prof. D. R. Hartree, F.R.S. *Nature*, 181 (4612):808, March 22, 1958. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic).

Wilkes:1984:IRC

[Wil84] M. V. Wilkes. Introduction to reprint of "*Calculating Instruments and Machines*" by D. R. Hartree. In ????, editor, *Calculating machines: recent and prospective developments and their impact on mathematical physics; and, Calculating instruments and machines*,

volume 6 of *Charles Babbage Institute Reprint Series*, pages ix–?? MIT Press, Cambridge, MA, USA, 1984. ISBN 0-262-08147-4. LCCN QA85 .H3 1984.

Wilkes:1985:MCP

[Wil85] M. V. (Maurice Vincent) Wilkes. *Memoirs of a Computer Pioneer*. MIT Press series in the history of computing. MIT Press, Cambridge, MA, USA, 1985. ISBN 0-262-23122-0. viii + 240 pp. LCCN QA76.17 .W55 1985. URL `https://en.wikipedia.org/wiki/Telecommunications_Research_Establishment`.

Wilson:1988:MCC

[Wil88] Stephen Wilson, editor. *Methods in Computational Chemistry: Volume 2. Relativistic Effects in Atoms and Molecules*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1988. ISBN 1-4612-8044-3 (print), 1-4613-0711-2 (e-book). xiv + 306 pp. LCCN QD1-999.

Williams:1997:HCT

[Wil97] Michael R. Williams. *A History of Computing Technology*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, second edition, 1997. ISBN 0-8186-7739-2 (hardcover). xi + 426 pp. LCCN QA76.17 .W55 1997. URL `http://catalogue.bnf.fr/ark:/12148/cb37514972q`.

Williams:1999:OBJ

[Wil99] R. M. Williams. Obituary: Bertha Jeffreys. *The Independent (London)*, ??(??):??, December 22, 1999. URL `https://en.wikipedia.org/wiki/Bertha_Swirles; https://en.wikipedia.org/wiki/Harold_Jeffreys; https://web.archive.org/web/20060902155227/http://www.physics.ucla.edu/~cwp/articles/jeffreys/jeffreys-obituary.html`.

Wood:1957:WFE

[WP57] J. H. Wood and G. W. Pratt. Wave functions and energy levels for Fe as found by the Unrestricted Hartree–Fock method. *Physical Review (2)*, 107(4):995–1001, August 1957. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRev.107.995`.

Weiss:1985:RCM

[WTE+85] Eric A. Weiss, Henry S. Tropp, Ralph Erskine, John A. N. Lee, Gwen Bell, and M. R. Williams. Reviews: The Computer Mu-

seum and J. Bernstein, Three Degrees Above Zero: Bell Labs in the Information Age and D. R. Hartree, Calculating Machines: Recent and Prospective Developments and Their Impact on Mathematical Physics, and, Calculating Instruments and Machines and W. Kozaczuk, Enigma: How the German Machine Cipher Was Broken and How It Was Read by the Allies in World War Two and S. Levy, Hackers and A. Osborne and J. Dvorak, Hypergrowth: The Rise and Fall of Osborne Computer Corporation and E. W. Pugh, Memories that Shaped an Industry and capsule reviews. *Annals of the History of Computing*, 7(3):258–277, July/September 1985. CODEN AHCOE5. ISSN 0164-1239. URL `http://dlib.computer.org/an/books/an1985/pdf/a3258.pdf; http://www.computer.org/annals/an1985/a3258abs.htm`.

Wilkes:1951:PPE

[WWG51] Maurice V. Wilkes, David J. Wheeler, and Stanley Gill. *The Preparation of Programs for an Electronic Digital Computer*. Addison-Wesley, Reading, MA, USA, 1951. 167 pp. LCCN QA76.5 .W55 1951.

Wilkes:1954:IPA

[WWG54] Maurice V. Wilkes, D. Wheeler, and Stanley Gill. *Introduction to Programming for an Automatic Digital Calculating Machine and Users' Guide to the EDSAC: a Supplement to* The Preparation of Programs for an Electronic Digital Computer. Cambridge University Press, Cambridge, UK, 1954. Part I by D. R. Hartree. Part II edited by E. N. Mutch.

Zangwill:2013:HTF

[Zan13] Andrew Zangwill. Hartree and Thomas: the forefathers of density functional theory. *Archive for History of Exact Sciences*, 67(3):331–348, May 2013. CODEN AHESAN. ISSN 0003-9519 (print), 1432-0657 (electronic). URL `http://link.springer.com/article/10.1007/s00407-013-0114-4`.

Zbikowski:2023:BBL

[ZJ23] Ryan M. Zbikowski and Calvin W. Johnson. Bootstrapped block Lanczos for large-dimension eigenvalue problems. *Computer Physics Communications*, 291(??):Article 108835, October 2023. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0010465523001807`.