



List of Books on ● **Electrodynamics** (Available in the Central Library)

How to recommend a book?

You may recommend the books by filling out recommendation forms available on the website available on the website

(<https://library.iitd.ac.in/book-recommendation>)

or through an online recommendation system

(<https://library.iitd.ac.in/obrs/>) using your Kerberos ID and Password.

Compiled by,
Collection Development Division,
Central Library
Indian Institute of Technology Delhi

 2659 6622/6096
 cdd@library.iitd.ac.in

Books available in the Central Library

1. Akhiezer, A. (1975). *Plasma electrodynamics*: Vol 1: Linear theory Oxford:Pergamon.
533.9:538.3 AKH-P 69029-69030 | CL
2. Akhiezer, A.I. (1963). *Quantum electrodynamics*. New York: Interscience Publication.
530.145:538.3 AKH-Q 21373 | CL
3. Alexandrov, A. F. (1984). *Principles of plasma electrodynamics*. Berlin: Springer-Verlag.
537.8 ALE-P 106675 | CL
4. Alfven, H. (1963). *Cosmical electrodynamics*. Oxford: Clarendon Press.
538.4:523.1 ALF-C 15873 | CL
5. Avetissian, Hamlet K. (2016). *Relativistic nonlinear electrodynamics: QED vacuum and matter in super-strong radiation fields*. (2nd ed.) Heidelberg: Springer.
537.8 AVE-R 169008 | CL
6. Batygin, V.V. and Topygin I.N. (1964). *Problems in electrodynamics*. London:Academic Press.
538.3 BAT-P 23185-23187; 24071 | CL;PH
7. Batygin, V.V. and Topygin, I.N. (1964). *Problems in electrodynamics*. London:Academic Press.
538.3 BAT-P 82984, 82887 | CL; PH
8. Becherrawy, Tamer (2012). *Mechanical and electromagnetic vibrations and waves*. Hoboken: John Wiley.
537.8 BEC-M 164692 | CL
9. Bergmann, Peter Gabriel (1949). *Basic theories of physics: mechanics and electrodynamics*. New York: Prentice-Hall.
531+533.3 BER-B 6921 | CL

10. Berman, Paul.R. (ed.) (1994). *Cavity quantum electrodynamics*. Boston: Academic Press.
537.8 -CAV 132657 | CL
11. Bialynicki-Birula, Iwo and Bialynicka-Birula, Zofia (1975). *Quantum electrodynamics*. Oxford: Pergamon Press.
530.145:538.3 BIA-Q 74627 | CL
12. Bortsov, Alexander A., Il' in, Yuri B. and Smolskiy, Sergey M. (2020). *Laseroptoelectronic oscillators*. Cham: Springer.
537.533 BOR-L 177541 | CL
13. Boyarkin, O. M. (2011). *Advanced particle physics*. Boca Raton: Taylor and Francis.
537.8 BOY-A 164651-164652 | CL
14. Braun, Artur (2020). *Quantum electrodynamics of photosynthesis: mathematical description of light, life and matter*. Boston: De Gruyter.
538.3 BRA-Q 176567 | CL
15. Chakraborty, Bishwanath (2002). *Principles of electrodynamics*. Kolkata: Books and Allied (P) Ltd.
538.3 CHA-P 143097-143098 | CL;CES
16. Clemmow, P.C. and Dougherty, J.P. (1969). *Electrodynamics of particles and plasmas*. Massachusetts: Addison-Wesley.
538.3 CLE-E 62209 | CL
17. Cohen, Tannoudji.C...[et al] (1989). *Photons and atoms*. New York: John Wiley.
538.3 COH-P 137102 | CL
18. Cohen-Tannoudji, Claude Grynberg, Gilbert, and Dupont-Roc, Jacques (2004). *Photon and atoms: introduction to quantum electrodynamics*. Weinheim: Wiley- VCH.
538.3 COH-P 158274 | CL
19. Craig, D.P. and Thirunamachandran T. (1984). *Molecular quantum electrodynamics: an introduction to radiation molecule interactions*. London: Academic Press.
537.3 CRA-M 105065 | CL

20. Davidson, P. A. (2019). *Introduction to electrodynamics*. Oxford: OxfordUniversity Press.
- 538.3 DAV-I 173842 | CL
21. Deshmukh, P. C. (2019). *Foundations of classical mechanics*. Cambridge:Cambridge University Press.
- 531 DES-F 178237-178239 | TB
22. Devanathan, V. (2018). *Textbook of relativistic quantum mechanics*. New Delhi:Narosa Publisher.
- 530.145:530.12 DEV-T 177047 | CL
23. Dutra, Sergio M. (2005). *Cavity quantum electrodynamics: the strange theory oflight in a box*. Hoboken: John Wiley.
- 535.14 DUT-C 146933; 147095 | CL;PH
24. Dutsch, Michael (2019). *From classical field theory to perturbative quantum fieldtheory*. Cham: Springer
- 530.145 DUT-F 177612 | CL
25. Englert, Berthold-georg (2014). *Lectures on classical electrodynamics*. Singapore: World Scientific.
- 537.8 ENG-L 172169 | CL
26. Eringen, A.C. and Maugin G.A. (1990). *Electrodynamics of continua II: fluids andcomplex media*. New York: Springer-Verlag.
- 537.8 ERI-E 129938 | CL
27. Evans, M.W. and Crowell, L.B. (2001). *Classical and quantum electrodynamics andthe B(3) field*. Singapore: World Scientific Publishing.
- 538.3 EVA-C 146272 | CL
28. Feynman, Richard P. (2018). *Quantum electrodynamics*. Boca Raton: Routledge.
- 538.3 FEY-Q 175932-175933 | CL
29. Fridman, Alexander and Kennedy, Lawrence A. (2021). *Plasma physics andengineering*.(3rd ed.) Boca Raton: CRC Press.
- 533.9 FRI-P 176094 | CL

30. Greiner, Walter and Reinhardt, Joachim (1994). *Quantum Electrodynamics*. Berlin:Springer-Verlag.

538.3 GRE-Q

135618 | CL

31. Greiner, Walter and Reinhardt, Joachim (2004). *Quantum electrodynamics*. (3rd ed.). New Delhi: Springer (India).

PH 537.8 GRE-Q

149366-149367,149368 | TB; PH

32. Griffiths (2013). *Introduction to electrodynamics*. (4th ed.). Noida: Pearson Education India Learning.

538.3 GRI-I

73751; 156162; 163955-164004 | BB; CL; TB

33. Griffiths, David J. (1999). *Introduction to electrodynamics*. (3rd ed.) New Delhi:Prentice Hall of India.

538.3 GRI-I

151475-151479; 73741-73742; 73744-73750; 73752; 73754 | TB;BB

34. Griffiths, David J. (2005). *Introduction to electrodynamics*. (3rd ed.) Delhi: Pearson Education.

TB 538.3 GRI-I

148350, BEB0824 | TB, BEB

35. Griffiths, David J. (2009). *Introduction to electrodynamics*. (3rd ed.) New Delhi:Prentice Hall.

538.3 GRI-I

156160 -156164; 156581-156585 | TB

36. Griffiths, David J. (2008). *Introduction to electrodynamics*. (3rd ed.). New Delhi:Prentice Hall.

538.3 GRI-I

BB74686-BB74695; BB75089-BB75098; BB75560-
BB75579; BB76255-BB76258 | BB;TB

37. Griffiths, David J. (1994). *Introduction to electrodynamics*. (3rd ed.) New Delhi:Prentice Hall of India.

TB 538.3 GRI-I

G21831; G21858; G22381; G23341; G23498 | TB;BB;CL

38. Griffiths, David J. (2015). *Introduction to electrodynamics*. (4th ed.) Noida: Pearson.

538.3 GRI-I

G23855 | CL

39. Griffiths, David J. (2020). *Introduction to electrodynamics*. (4th ed.) New Delhi:Cambridge University Press.

538.3 GRI-I

BB76601-BB76610 | BB

40. Griffiths, David J. (1991). *Introduction to electrodynamics*. New Delhi: Prentice Hall of India.
538.3 GRI-I 127458-127459; 127461-127465; 127467 | TB:PH
41. Griffiths, David, Derbes, David & Sohn, Richard (Eds) (2022). *Sidney Coleman's lectures on relativity*. Cambridge: Cambridge University Press.
530.12 -SID 178187 | CL
42. Guo, Hongyu (2021). *What are tensors exactly?* Singapore: World Scientific. 514.743.2:53
GUO-W 175536 | CL
43. Gupta, S., Singh S.P. and Kumar V. (1982). *Electrodynamics: electricity and magnetism*. Meerut: Pragati Prakashan.
538.3 GUP-E 103693 | TB
44. Gupta, Suraj N. (1977). *Quantum Electrodynamics*. New York: Gordon & Breach.
538.3 GUP-Q 82348; 95622 | CL;TB
45. Healy, John J. (ed.) (2016). *Linear canonical transforms*. New York: Springer.
530.145 -LIN 169623 | CL
46. Hohenester, Ulrich (2020). *Nano and quantum optics: an introduction to basic principles and theory*. Cham: Springer.
535.14 HOH-N 175400 | CL
47. Hopf, F.A. and Stegeman, G.I. (1985). *Applied classical electrodynamics*. New York: John Wiley.
538.3 HOP-A 108726 | CL
48. Ingarden, Roman S. and Jamiołkowski, Andrzej. (1985). *Classical electrodynamics*. Amsterdam: Elsevier.
538.3 ING-C 105425 | CL
49. Jackson, J.D. (1962). *Classical electrodynamics*. New York: John Wiley.
538.3 JAC-C 99194; 24780 | PH
50. Jackson, J.D. (1975). *Classical electrodynamics*. New York: John Wiley.
538.3 JAC-C 100496-100500 | TB

51. Jackson, J.D. (1990). *Classical electrodynamics* (2nd ed.). New Delhi: John Wiley.
538.3 JAC-C 125003-125005 | TB
52. Jackson, John (2003). *Chemical electrodynamics*. (3rd ed.) New York: John Wiley.
538.3 JAC-C 144477 | CL
53. Jackson, John David (1999). *Classical electrodynamics*. (3rd ed.) New York: JohnWiley.
TB 538.3 JAC-C 144154; 144155 | TB
54. Jackson, John David (2007). *Classical electrodynamics*. (3rd ed.).New Delhi: Wiley(India).
537.8 JAC-C 149330-149335 | CL;TB;PH
55. Jancel, R. and Kahan Th. (1963). *Electrodynamics of plasmas*. London: John-Wiley.
537.56 JAN-E 29892; 24521 | CL
56. Joshi, Deep Chandra (2006). *Introduction to quantum electrodynamics and particlephysics*.
New Delhi: I. K. International.
537.8:539.12 JOS-I 153230 | PH
57. Kakani, S L and Subhra, Kakani (2020). *Electrodynamics classical and quantum*.
New Delhi: CBS Publishers.
537.8:530.145 KAK-E G23790 | CL
58. Kallen, G. (1972). *Quantum Electrodynamics*. Heidelberg: Springer-Veslag.
530.145:538.3 KAI-Q 59851 | CL
59. Karaoglu, Bekir (2020). *Classical physics: a two-semester coursebook*. Switzerland:Springer.
53 KAR-C 175920 | CL
60. Kavokin, Alexy V. (ed) (2011). *Microcavities*. New York: Oxford University Press.
621.382 -MIC 164528 | CL
61. Kavokin, Alexey V. (ed.) (2017). *Microcavities*. (2nd ed.). New York: OxfordUniversity Press.
621.382 -MIC 170729 | CL
62. Keller, Ole (2020). *Quantum theory of near-field electrodynamics*. (South Asian ed.).
Heidelberg: Springer.
537.851 OLF-Q 174482 | CL

63. Kelley, Michael C. (1989). *Earth's Ionosphere: plasma physics and electrodynamics*. London: Academic Press.
- 551.510.5 KEL-E 122719 | CES
64. Kira, Mackillo and Koch, Stephan W (2012). *Semiconductor quantum optics*. Cambridge: Cambridge University Press.
- 621.382 KIR-S 164661 | CL
65. Kleinert, Hagen (2022). *Particles and quantum fields*. Singapore: World Scientific.
- 530.145 KLE-P 177775 | CL
66. Kogut, John B. (2018). *Special relativity, electrodynamics, and general relativity:from Newton to Einstein*. (2nd ed.) London: Elsevier.
- 530.12:537.8 KOG-S 172570 | CL
67. Landan, L.D. Lipshitz, E.M. (1984). *Electrodynamics of continuous media*. (2nd ed.). Oxford: Pergamon Press.
- 532.3:537 LAN-E 102497 | TB
68. Lechner, Kurt (2018). *Classical electrodynamics: A modern perspective*. Cham: Springer.
- 537.8 LEC-C 174900 | CL
69. Matveyev, A.N. and Landovitz (1966). *Principles of electrodynamics*. New York: Reinhold.
- 538.3+537.2/.3 MAT-P 23229 | CL
70. Melrose, Donald (2013). *Quantum plasma dynamics*. New York: Springer.
- 533.95 MEL-Q 162815 | CL
71. Milton, Kimball & Schwinger, Julian (2024). *Classical electrodynamics*, 2nd ed. Boca Raton: CRC Press.
- 537.8 MIL-C 180545 | CL
72. Moon, Parry and Spencer, Domina Ebarle (1960). *Foundations of electrodynamics*. Princeton: D. Van Nostrand.
- 538.3 MOO-F 13070 | CL

73. NATO Advanced Institution Quantum of Electrodynamics Fileds Germany 1981 (1983). *Quantum of electrodynamics of strong fields*. New York: Plenum Press.
538.3(063) NAT-Q 94082 | CL
74. Nefyodov, Eugene I. and Smolskiy, Sergey M. (2019). *Electromagnetic fields and waves: microwave and mmWave engineering with generalized macroscopic electrodynamics*. Switzerland: Springer.
621.37 NEF-E 172720 | CL
75. Nolting, Wolfgang (2016). *Theoretical physics 3: electrodynamics*. Berlin: Springer.
53 NOL-T 169011 | CL
76. Novozhilov, Yu.V. (1981). *Electrodynamics*. Moscow: MIR Pub.
538.3 NOV-E 98480 | TB
77. Oppenheimer, J. Robert (1970). *Lectures on electrodynamics*. New York: Gordon and Breach.
538.3 OPP-L 57824 | CL
78. Oughstun, Kurt E. (2019). *Electromagnetic and optical pulse propagation: volume 1: spectral representations in temporally dispersive media*. (2nd ed.) Cham: Springer.
537.87 OUG-E 177868 | SENSE
79. Padmanabhan, T. (2010). *Theoretical astrophysics: volume 1: astrophysical processes*. New Delhi: Cambridge University Press.
52 PAD-T 176032 | CL
80. Pondrom, Lee G. (2023). *Introduction to high energy physics: particle physics for the beginner: problems and solutions*. Singapore: World Scientific.
539.12 PON-I 178187 | CL
81. Power, E.A. (1964). *Introductory quantum electrodynamics*. London: Longmans.
538.3:530.145 POW-I G10412 | CL
82. Pondrom, Lee G. (2023). *Introduction to high energy physics*. Singapore: World Scientific.
539.12 PON-I 178237 | CL

83. Puri, S.P. (1990). *Classical electrodynamics*. New Delhi: McGraw Hill.
538.3 PUR-C 130528 | CL
84. Rado vitskii, V.P. & Strel'tsov B.N. Pankhurst O.S. (1974). *Electrodynamics of textile fibres*. Weet
Yarkshire: British Library -Lending Divison.
677.1:530.3 RAD-E 59555 | CL
85. Sarychev, Andrey K. and Shalaev, Vladimir M. (2007). *Electrodynamics of metamaterials*. New
Jersy: World Scientific.
RL-EN 537.8(03) SAR-E 153486 | REF
86. Scharf, G. (1989). *Finite quantum electrodynamics*. Berlin: Springer-Verlag.
537.8 SCH-F 120436 | CL
87. Scharf, gunter (1994). *From electrostatics to optics: a concise electrodynamicscourse*.
Berlin: Springer-Verlag.
537.8 SCH-F 134097 | CL
88. Scheck, Florian (2018). *Classical field theory: on electrodynamics, non-abeliangauge theories
and gravitation*. (2nd ed.). Germany: Springer.
530.145 SCH-C 173623 | CL
89. Schwartz, Matthew D. (2014). *Quantum field theory and standard model*.
Cambridge: Cambridge University Press.
530.145 SCH-Q 177999 | CL
90. Shiozawa, T (2004). *Classical relativistic electrodynamics*. Berlin: Springer-Verlag.
538.3 SHI-C 147257 | CL
91. Sommerfeld, A. (1952). *Electrodynamics: Lectures on theoretical physics*. New York:
Academic Press.
538.3 SOM-E 16955 | CL
92. Sommerfeld, Arnold (1964). *Electrodynamics*. New York: Academic Press.
538.3 SOM-E 17575 | CL

93. Sommerfeld, Arnold (2011). *Electrodynamics: lectures on theoretical physics*. Kolkata: Levant Books.
537.8 SOM-E 180488 | CL
94. Stafl, Milos & Toomas G.A. (ed.) (1967). *Electrodynamics of electrical machines*. Prague: Academia.
621.313 STA-E G14822 | CL
95. Taflove Allen (ed.) (2013). *Advances in FDTD computational electrodynamics: photonics and nanotechnology*. Boston: Artech House.
535.14:620.3 -ADV 164407 | CL
96. Taflove, Allen, and Hagness Susan C. (2005). *Computational electrodynamics: the finite-difference time-domain method*. (3rd ed.) Boston: Artech House.
537.8 TAF-C 148000 | CL
97. Taflove, Allen and Hagness, Susan C. (2000). *Computational electrodynamics: finite-difference time-domain method (with C.D.)*. (2nd ed.). Boston: Artech House.
537.8 TAF-C 143167 | CL
98. Taylor, B.N. (1969). *Fundamental constants and quantum electrodynamics*. New York: Academic Press.
538.3 TAY-F 45438 | PH
99. Thirring, W.E. (1958). *Principles of Quantum Electrodynamics*. London: Academic Press.
530.145:538.3 THI-P 29825 | CL
100. Toptygin, Igor N. (2014). *Foundations of classical and quantum electrodynamics*. Germany: John Wiley.
538.3 TOP-F 166615 | CL
101. Tricker, R.A.R. (1965). *Early electrodynamics: the first law of circulation*. Oxford: Pergamon Press.
538.3 TRI-E G15687 | CL
102. Tsu, Raphael (2012). *Superlattice to nanoelectronics*. (2nd ed.) New Delhi: Elsevier India.
537.8:620.3 TSU-S 163028 | CL

103. Urban, Paul. (1970). *Topics in applied quantum electrodynamics*. Wiley: Springer.
538.3:530.145 URB-T 45974 | PH
104. Visscher, Pieter B. (1988). *Fields and electrodynamics*. New York: John Wiley.
537.8 VIS-F 117093 | CL
105. Volland, Hans. (1984). *Atmospheric electrodynamics*. Berlin: Springer-Verlag.
538.4:551.594 VO 101776 | CL
106. Walecka, John Dirk (2021). *Topics in modern physics: theoretical foundations*. New Jersey: World Scientific.
53 AL-T 176076-176077 | CL; PH
107. Wangsness, Ronaod K. (1963). *Introduction to theoretical physics: classical mechanics and electrodynamics*. New York: John Wiley.
531+537/538 WAN-I 22158 | CL
108. Wilcox, Walter and Thron, Chris (2016). *Macroscopic electrodynamics: an introductory graduate treatment*. Singapore: World Scientific.
537.8 WIL-M 169218 | CL
109. Zhou, Shu-Ang (1999). *Electrodynamics of solids and microwave superconductivity*. New York: John Wiley.
538.3:537.311 ZHO-E 139491 | CL

e-Books Available in the Central Library

110. Dittrich, W. & Reuter, M. (1985). *Effective Lagrangians in Quantum Electrodynamics*.
[Online Access](#)
111. Graff, G; Klempt, E & Werth, G(eds.) (1981). *Present Status and Aims of Quantum Electrodynamics : Proceedings of the Symposion Held at Mainz University May 9-10, 1980*.
[Online Access](#)
112. Janaswamy, Ramakrishna, (1958). *Engineering electrodynamics: a collection of theorems, principles and field representations*.
[Online Access](#)

- 113.Land, Martin & Horwitz, Lawrence P. (2020). *Relativistic Classical Mechanics and Electrodynamics*. [Online Access](#)
- 114.Likharev, K. K. *Classical electrodynamics: problems with solutions*. [Online Access](#)
- 115.Likharev, K. K. *Classical electrodynamics: lecture notes*. [Online Access](#)

Updated by Central Library

On 25th April 2025