

Boris Shklovskii
Books, Reviews and Papers published before 1994

MONOGRAPHY

1. B.I. Shklovskii, A.L. Efros, Electronic properties of doped semiconductors, Springer, Heidelberg, 1984

REVIEW PAPERS

2. B.I. Shklovskii, Hopping conduction in lightly doped semiconductors, Fiz. Tekh. Poluprov. 6, 1197 (1972). (English transl.: Sov. Phys.-Semicond. 6, 1053 (1972))
3. B.I. Shklovskii, A.L. Efros, Percolation theory and conductivity of disordered systems, Uspekhi Fiz. Nauk 117, 401 (1975)
4. B.I. Shklovskii, A.L. Efros, Impurity band structure of lightly doped semiconductors, Fiz. Tekh. Poluprov 14, 825 (1980) (Engl. transl.: Sov. Phys.-Semicond. 14, 487 (1980))
5. A.L. Efros, B.I. Shklovskii, "Electron-Electron interaction in disordered systems with localized states," in "Electron-Electron interaction in disordered systems, ed. by A.L. Efros, M. Pollak. North-Holland, Amsterdam 1985
6. B.I. Shklovskii, B.Z. Spivak, Scattering and interference phenomena in variable range hopping conduction, in: "Hopping conduction in semiconductors," ed. by M. Pollak and B.I. Shklovskii, North-Holland, Amsterdam /1990

ORIGINAL PAPERS

7. B.I. Shklovskii, O.B. Ptitzyn, Dimension of Branching polymer molecules, High Polymers 8, 746 (1966)
8. L.E. Gurevich, B.I. Shklovskii, To the theory of second sound in semiconductors, Fiz. Tv. Tela 8, 3050 (1966)
9. L.E. Gurevich, B.I. Shklovskii, High frequency longitutive sound absorption in solids at low temperatures, Fiz. Tv. Tela 9, 526 (1961)
10. B.I. Shklovskii, Hypersound absorption in ferroelectrics at low temperatures, Fiz. Tv. Tela 9, 1917 (1967)
11. B.I. Shklovskii, G.A. Roman, Hypersound absorption in antiferromagnetics, Fiz. Tv. Tela 9, 2794 (1967)
12. B.I. Shklovskii, I.V. Ioffe, Electric field effect on sound absorption in dielectrics, Fiz. Tv. Tela 9, 2116 (1967)
13. L.E. Gurevich, B.I. Shklovskii, Ultrasound absorption in dielectric crystals, Zh. Eksp. Teor. Fiz. 53, 1726 (1967)

14. B.I. Shklovskii, Sound absorption in crystals with quasilocalized phonon states, Fiz. Tv. Tela 10, 634 (1968)
15. S.M. Pyvkin, V.B. Rysakov, I.M. Fishman, B.I. Shklovskii, I.D. Yaroshetskii, Stimulated Mandelstam-Brillouin scattering dependence on light intensity in fused silica. , Fiz. Tv. Tela 9, 2735 (1967)
16. H. Nielsen, B.I. Shklovskii, Nonlinear heat transfer in dielectrics in the regime of viscous phonon drift, Fiz. Tv. Tela 10, 3602 (1968)
17. H. Nielsen, B.I. Shklovskii, Heat transfer and second sound in dielectrics at high phonon drift velocity, Zh. Exp. Teor. Fiz 57, 709 (1969)
18. A.L. Efros, B.I. Shklovskii, Gyrothermal effect in crystals at low temperatures, JETP Letters 11, 265 (1970)
19. Ya Balagurov, V.G. Vaks, B.I. Shklovskii, Critical mode damping in segnetoelectrics of displacement type. Fiz. Tv. Tela 12, 89-99 (1970)
20. B.I. Shklovskii, A.L. Efros, Density-of-states tails in heavily doped semiconductors, Fiz. Tekh. Poluprov ' 4, 305 (1970) - (Engl. transl.: Sov. Phys.-Semicond. 4, 249 (1970))
21. B.I. Shklovskii, A.L. Efros, Band tailing and absorption of light in semiconductors, Zh. Eksp. Theor. Fiz. 58, 657 (1970) - (Engl. transl.: Sov. Phys.-JETP 31, 351 (1970))
22. B.I. Shklovskii, A.L. Efros, Interband absorption of light in heavily doped semiconductors, Zh. Eksp. Theor. Fiz. 59, 1343 (1970) - (Engl. transl.: Sov. Phys.-JETP 32, 733 (1971))
23. B.I. Shklovskii, A.L. Efros, Impurity band and conductivity of compensated semiconductors, Zh. Eksp. Theor. Fiz. 60, 867 (1971) - (Engl. transl.: Sov. Phys.-JETP 33, 468 (1971))
24. B.I. Shklovskii, A.L. Efros, Transition from metallic to activated conductivity in compensated semiconductors. Zh. Eksp. Theor. Fiz. 61, 816 (1971) - (Engl. transl.: Sov. Phys. JETP 34, 435 (1972))
25. B.I. Shklovskii, M.S. Shur, A.L. Efros, S-type current-voltage characteristic of a compensated semiconductor, Fiz. Tekh. Poluprov. 5, 1938 (1971) - (Engl. transl.: Sov. Phys. Semicond. 5, 1682 (1971))
26. B.I. Shklovskii, Hopping conductivity of semiconductors in strong magnetic fields, Zh. Eksp. Theor. Fiz. 61, 2033 (1971) - Engl. transl.: Sov. Phys.-JETP 34, 108 (1972)
27. B.I. Shklovskii, A.L. Efros, I.Y. Yanchev, Activation energy of hopping condition, Zh. Eksp. Theor. Fiz. Pis. Red. 14, 348 (1971) - Engl. transl.: Sov. Phys.-JETP Lett. 14, 233 (1971)
28. B.I. Shklovskii, Optical and electrical bands of an amorphous semiconductor, Zh. Eksp. Theor. Fiz. Pis. Red. 14, 397 (1971) - Engl. transl.: Sov. Phys.-JETP Lett. 14, 269 (1971)
29. A.L. Efros, B.I. Shklovskii, I.Y. Yanchev, Impurity conductivity in low compensated semiconductors, Phys. Stat. Sol. B 50, 45 (1972)

30. B. I. Shklovskii, A.L. Efros, Completely compensated crystalline semiconductor as a model of an amorphous semiconductor, Zh. Eksp. Theor. Fiz. 62, 1156 (1972); Engl. transl.:Sov. Phys.-JETP 35, 610 (1972)
31. B.I. Shklovskii, I.S. Shlimak, Hopping conduction in germanium. Fiz. Tekh. Poluprov. 6, 129 (1972) Engl. transl.: Sov. Phys.-Semicond. 6, 104 (1972)
31. Y.S. Galpern, B.I. Shklovskii, A.L. Efros, Low temperature conductivity of strongly compensated semiconductors, Proc. 11th Int. Conf. on Phys. of Semicond. Warsaw (1972)
33. B.I. Shklovskii, Hopping conduction in strong electric field, Fiz. Tekh. Poluprov. 6, 2335 (1972)
34. B.I. Shklovskii, I.Ya Yanchev, Determination of degree of compensation of semiconductors from the saturation of hopping conduction. Fiz. Tekh. Poluprov. 6, 1616 (1972) - Engl. transl.: Sov. Phys.-Semicond. 6, 1398 (1972)
35. A.S. Skal, B.I. Shklovskii, Impurity concentration dependence of hopping conduction in semiconductors, Fiz. Tekh. Poluprov 7, 1589 (1973); Engl. transl.: Sov. Phys.Semicond. 7, 1058 (1973)
36. A.S.Skal. B.I. Shklovskii, A.L. Efros, Percolation level in a two-dimension random potential, Fiz. Tverd. Tela 15, 1423 (1973) - Engl. transl.: Sov. Phys.-Solid State 15, 961 (1973)
37. A.S. Skal, B.I. Shklovskii, A.L. Efros, Percolation level in a three-dimensional random potential, Zh. Eksp. Theor. Fiz. Pis. Red. 170, 522 (1973); Engl. Transl.: Sov. Phys.-JETP Lett 17, 377 (1973)
38. I.Ya Korenblit, E.F. Shender, B.I. Shklovskii, Percolation approach to the phase transition in very dilute ferromagnetic alloys, Phys. Lett. A46, 275 (1973)
39. B.I. Shklovskii, A.L. Efros, Localization of electrons in a magnetic field, Zh. Eksp. Theor. Fiz. 64, 2222 (1973) - Engl. transl.: Sov. Phys.-JETP 37, 1122 (1973)
40. B.I. Shklovskii, Theory of exponential magnetoresistance in semiconductors, Fiz. Tekh. Poluprov. 8, 416 (1973) - Engl. transl.: Sov. Phys.-Semicond. 8, 268 (1973)
41. B.I. Shklovskii, Hopping conduction of heavily doped semiconductors, Fiz. Tekh. Poluprov. 7, 112 (1973) - Engl. transl.: Sov. Phys.-Semicond. 7, 77 (1973)
- 41a. B.I. Shklovskii, Hopping conduction in semiconductors in a strong electric field, Fiz. Tekh. Poluprov. 6, 2335 (1973) - Engl. transl.: Sov. Phys.-Semicond. 6, 1964 (1973)
42. A.S. Skal, B.I. Shklovskii, Mott equation for low temperature hopping conductivity, Fiz. Tverd. Tela 16, 1820 (1974) - Engl. transl.: Sov. Phys.-Solid State 16, 1190 (1974)
43. B.L. Gelmont, A.R. Gadzhiev, B.I. Shklovskii, I.S. Shlimak, A.L. Efros,- Hopping conduction in germanium silicon solid solutions, Fiz. Tekh. Poluprov. 8, 2377 (1974) - Engl. transl: Sov. Phys.-Semicond. 8, 1549 (1974)
44. A.S. Skal, B.I. Shklovskii, Topology of the infinite cluster of the percolation theory and its relationship to the theory of hopping conduction, Fiz. Tekh. Poluprov. 8, 1586 (1974) . Engl. transl.: Sov. Phys.-Semicond. 8, 1029 (1975)

45. M.E. Levinshtein, B.I. Shklovskii, M.S. Shur, A.L. Efros, The relation between the critical exponents of percolation theory, *Zh. Eksp. Theor. Fiz.* 69, 386 (1975) - Engl. transl.: *Sov. Phys.-JETP* 42, 197 (1975)
46. A.S., Skal, B.I. Shklovskii, A.L. Efros., Activation energy of hopping conduction, *Fiz. Tverd. Tela.* 17, 506 (1975) - Engl. transl.: *Sov. Phys.-Solid State* 17, 316 (1975)
47. B.I. Shklovskii, A.L. Efros, The preexponential factor of hopping conduction, *Zh. Tekh. Fiz. Pis. Red.* 1, 174 (1975) - Engl. transl.: *Sov. Phys.-Tech. Phys. Lett.* 1, 83 (1975)
48. E.F. Shender, B.I. Shklovskii, The Curie temperature of dilute ferromagnetic alloys near the percolation threshold, *Phys. Lett.* A55, 77 (1975)
49. A.L. Efros, B.I. Shklovskii, Coulomb gap and low-temperature conductivity of disordered systems, *J. Phys.* C8, L49 (1975)
50. B.I. Shklovskii, Hopping conduction in semiconductor films. *Phys. Lett.* A51, 289 (1975)
51. A.L. Efros, B.I. Shklovskii, Critical behavior of conductivity and dielectric constant near the metal-non-metal transition threshold, *Phys. Stat. Sol.* B76, 476 (1976)
52. B.I. Shklovskii, Non-ohmic hopping conduction, *Fiz. Tekh. Poluprov.* 10, 1440 (1976) - Engl. transl.: *Sov. Phys. Semicond.* 10, 855 (1976)
53. A.: Efros, B.I. Shklovskii, Hopping Conduction and Critical Indices of the Percolation Theory, in *Proc. 6th Int. Conf. Amorphous and Liquid Semicond.* (Nauka, Leningrad 1976) p. 89
54. B.I. Shklovskii, Critical behavior of the Hall coefficient near the percolation threshold, *Zh. Eksp. Theor. Fiz.* 72, 288 (1977) - Engl. transl.: *Sov. Phys.-JETP* 45, 152 (1977)
55. B.I. Shklovskii, Thickness dependence of hopping conduction in amorphous films. Experiment versus theory, *Phys. Stat. Sol.*, B83, K11 (1977)
56. B. I. Shklovskii, Anisotropy of hopping conduction, *Fiz. Tekh. Poluprov.* 1, 2135 (1977) Engl. transl.: *Sov. Phys. Semicond.* 11, 1253 (1977)
57. B.I. Shklovskii, Anisotropy of percolation conduction, *Phys. Stat. Sol.* B85, K111 (1978)
58. B.I. Shklovskii, Nguyen Van Lien, Hopping magnetoresistance of n-type germanium, *Fiz. Tekh. Polprov.* 12, 1346 (1978); Engl. transl.: *Sov. Phys.-Semicond.* 12, 796 (1978)
59. S.D. Baranovskii, A.L. Efros, B.K. Gelmont, B.I. Shklovskii, Coulomb gap in disordered systems. Computer simulation, *Solid State Commun.* 27, 1 (1978)
60. A.L. Efros, Nguyen Van Lien, B.I. Shklovskii, Impurity band structure in lightly doped semiconductors, *J. Phys.* C12, 1869 (1979)
61. B. I. Shklovskii, Percolation conductivity in strong electric fields, *Fiz. Tekh. Poluprov.* 13, 93 (1979); Engl. transl. *Sov. Phys.-Semicond.* 13, 53 (1979) .
62. Nguyen Van Lien, B.I. Shklovskii, Percolation level in lightly doped semiconductors, *Fiz. Tekh. Poluprov.* 13, 1763 (1979), Engl. transl.: *Sov. Phys.-Semicond.* 13, 1025 (1979)

63. Nguyen Van Lien, B.I. Shklovskii, A.L. Efros, Activation energy of hopping conduction in lightly doped semiconductors, *Fiz. Tekh. Poluprov.* 13, 2192 (1979) - Engl. transl.: *Sov. Phys.-Semicond.* 13, 1281 (1979)
64. Nguyen Van Lien, B.I. Shklovskii, A.L. Efros, Activation energy of hopping conduction in lightly doped semiconductors, *Fiz. Tekh. Poluprov.* 13, 2192 (1979) - Engl. transl.: *Sov. Phys.-Semicond.* 13, 1281 (1979)
65. A.L. Efros, Nguyen Van Lien, B.I. Shklovskii, Variable range hopping in doped crystalline semiconductors, *Solid State Commun.* 32, 851 (1979)
66. Sh.M. Kogan, Nguyen Van Lien, B.I. Shklovskii, Electric fields in a weakly doped compensated semiconductor, *Zh. Eksp. Theor. Fiz.* 78, 1933 (1980) - Engl. transl.: *Sov. Phys.-JETP* 51, 971 (1980)
67. S.D. Baranovskii, B.I. Shklovskii, A.L. Efros, Elementary excitation in disordered systems with localized electrons, *Zh. Eksp. Theor. Fiz.* 78, 392 (1980) - Engl. transl.: *Sov. Phys. JETP* 51, 199 (1980)
68. B.I. Shklovskii, Theory of $1/f$ noise for hopping conduction, *Solid State Commun.* 33, 273 (1980)
69. B.I. Shklovskii, A.L. Efros, Impurity band and hopping conduction, *J. Phys. Soc. Japan* 49, 359 (1980)
70. S.M. Kogan, B.I. Shklovskii, Excessive low frequency noise in hopping conduction, *Fiz. Tech. Poluprov* 15, 1049 (1981)
71. B.I. Shklovskii, Anisotropy of percolation conduction in a mixture of two anisotropic media, *Zh. Tekh. Fiz. Pis. Red.* 7, 1312 (1981) - Engl. transl.: *Sov. Phys.-Tech. Phys. Lett.* 7, 562 (1981)
72. M.S. Bello, E.I. Levin, B.I. Shklovskii, A.L. Efros, Density of localized states in the surface impurity band of a metal-insulator-semiconductor structure, *Zh. Eksp. Theor. Fiz.* 83, 1596 (1981) - Engl. transl.: *Sov. Phys.-JETP* 53, 822 (1981)
73. B.I. Shklovskii, A.L. Efros, Phononless hopping conduction in disorderd systems, *Zh. Eksp. Theor. Fiz.* 81, 406 (1981) - Engl. transl.: *Sov. Phys.-JETP* 54, 218 (1981)
74. Nguyen Van Lien, B.I. Shklovskii, Hopping conduction in strong electric fields and directed percolation, *Solid State Commun.* 38, 99 (1981)
75. E.I. Levin, Nguyen Van Lien, B.I. Shklovskii, The resistor network method in the theory of hopping conduction, *Zh. Eksp. Theor. Fiz.* 82, 1591 (1982) - Engl. transl.: *Sov. Phys.-JETP* 55, 921 (1982)
76. E.I. Levin, Nguyen Van Lien, B.I. Shklovskii, Hopping electrical conduction in strong electric fields: A numerical computer experiment, *Fiz. Tekh. Poluprov.* 16, 815 (1982) - Engl. transl.: *Sov. Phys. Semicond.* 16, 523 (1982)
77. B.I. Shklovskii, Electron-electron interaction effect on infrared absorption by small particles, *JETP-Lett.* 36, 287 (1982)

78. B.I. Shklovskii, Variable-range hopping conduction in a strong magnetic field, Zh. Eksp. Theor. Fiz. Pis. Red. 36, 43 (1982) - Engl. transl.: Sov. Phys.-JETP Lett. 36, 287 (1982)
79. B.I. Shklovskii, A.L. Efros, Tunnel transparency of disordered systems in a magnetic field, Zh. Eksp. Theor. Fiz. 84, 81 (1983) - Engl. transl.: Sov. Phys.-JETP 57 (1983)
80. A.B. Khaetskii, B.I. Shklovskii, Anomalous tunneling across magnetic field near semiconductor surface, Zh. Eksp. Theor. Fiz. 85, 721 (1983) - Engl. transl.: Sov. Phys.-JETP 58, 421 (1983)
81. B.I. Shklovskii, Positive magnetoresistance in the variable range hopping conduction regime, Fiz. Tekh. Poluprov. 17, 2055 (1983) - Engl. transl.: Sov. Phys. Semicond. 17, 1311 (1983)
82. A.N. Ionov, B.I. Shklovskii, I.S. Shlimak, Magnetoresistance of germanium in the variable-range hopping conduction region, Fiz. Tekh. Poluprov. 17, 503 (1983) - Engl. transl.: Sov. Phys. Semicond. 17, 314 (1983)
83. B.I. Shklovskii, B.Z. Spivak, Scattering effect on the electron tunneling and variable range hopping conduction, J. Stat. Phys. 38, 267 (1984)
84. S.D. Baranovskii, B.I. Shklovskii, A.L. Efros, Screening in localized electron system, Zh. Eksp. Theor. Fiz. 1793 (1984) - Engl. transl: Sov. Phys. JETP 60 1031 (1984).
85. B.I. Shklovskii, New problem of percolation theory and conduction of granular metals, Fiz.-Tv. Tela 26 585 (1984).
86. E.I. Levin, B.I. Shklovskii, Low-temperature hopping conduction in strong electric field. Computer experiment, Fiz. Tekh. Poluprov 18, 856 (1984) - Engl. transl: Sov. Phys.-Semicond., 11, 534 (1984).
87. V.L. Nguyen, B.I. Shklovskii, B.Z. Spivak, Aharonov-Bohm oscillations with normal and superconductive flux-quanta in hopping conduction, Pis'ma Zh. Eksp. Theor. Fiz. 41, 35 (1985) - Engl. transl: Sov. Phys. JETP Letters 41, 42 (1985).
88. B.I. Shklovskii, A.L. Efros, Impurity band conduction and related phenomena, in: Physics of Semiconductors, Plenum Press (1985).
89. B.Z. Spivak, V.A. Kharchenko, B.I. Shklovskii, Scattering effect on VRH conduction, Fiz. Tekh. Poluprov. 19, 493 (1985).
90. V.L. Nguyen, B.Z. Spivak, B.I. Shklovskii, Tunnel hops in disordered systems, Zh. Eksp.Theor. Fiz. 89, 1770 (1985) - Engl. transl.: Sov. Phys.-JETP 62, 1021 (1985)
91. B.I. Shklovskii, A.L. Efros, Density of state oscillations of 2d electron gas in magnetic field, Pis'ma Zh. Eksp. Theor. Fiz. 44, 95 (1986) - Engl. Transl: Sov. Phys.-JETP Letters 44, 123 (1986).
92. B.L. Altshuler, B.I. Shklovskii, Repulsion of energy levels and conductivity of small metallic samples, Zh. Eksp. Theor. Fiz. 91, 220 (1986) - Engl. Transl: Sov. Phys.-JETP 64, 127 (1986).
93. B.I. Shklovskii, Model of surface recombination in amorphous semiconductors, Pis'ma Zh. Eksp. Theor. Fiz. 44, 95 (1986), - Engl. Transl: Sov. Phys.-JETP letters 14, 123 (1986)

94. S.D. Baranovskii, E.I. Ivchenko, B.I. Shklovskii, New regime of recombination of photoinduced carriers in amorphous semiconductors, Zh. Eksp. Theor. Fiz. 22, 2234 (1987) - Engl. Transl.: Sov. Phys.-JETP 65, 1260 (1987).
95. S.D. Baranovskii, V.G. Karpov, B.I. Shklovskii, Theory of non-radiative recombination in amorphous semiconductors, J. Non-Cryst. Solids 97-98, 487 (1987).
96. A.L. Efros, B.I. Shklovskii, Influence of electron-electron interaction on hopping conduction of disordered systems, J. Non-Cryst. Solid 97-98, 31 (1987).
97. E.I. Levin, V.L. Nguyen, B.I. Shklovskii, A.L. Efros, Coulomb gap and hopping electric conduction. Computer Simulation, Zh. Eksp. Theor. Fiz. 92, 1499 (1987) - Engl. Transl.: Sov. Phys.-JETP 65, 842 (1987).
98. S.D. Baranovskii, B.I. Shklovskii, V.G. Karpov, Theory of non-radiative recombination in amorphous semiconductors, Zh. Eksp. Theor. Fiz. 94, 278 (1988) - Eng. Transl.: Sov. Phys.-JETP 67, 588 (1988).
99. D.I. Aladashvili, Z. Adamia, K. Lavdovskii, E.I. Levin, B.I. Shklovskii, Negative differential resistance in hopping region in silicon, Pis'ma v Zh. Eksp. Theor. Fiz. 47. 390 (1988) - Engl. Transl.: Sov. Phys.-JETP Lett. 47. 466 (1988).
100. B.L. Altshuler, I. Zharekeshev, S.A. Kotochigova, B.I. Shklovskii, Repulsion between energy levels and the metal-insulator transition, Zh. Eksp. Theor. Fiz. 94, 343 (1988) - Engl. Transl.: Sov. Phys.-JETP 67, 625 (1988).
101. E.I. Levin, B.I. Shklovskii, Negative differential conductivity of low density electron gas in random potential, Solid State Comm. 67. 233 (1988).
102. B.I. Shklovskii, H. Fritzsche and S.D. Baranovskii, Electronic Transport and Recombination in Amorphous semiconductors at Low Temperatures, Phys. Rev. Lett. 62, 2989 (1989).
103. E.I. Levin, I.M. Ruzin, B.I. Shklovskii, Transverse hopping conductivity of amorphous films in strong electric fields. Fiz. Tekh. Polup. 22, 624 (1988) - Engl. Transl.: Sov. Phys.-Semicond. 22, 401 (1988).
104. M.E. Raikh, I.M. Ruzin and B.I. Shklovskii, Influence of localized states in barrier on a fluctuation tunnel current flowing across a metal semiconductor contact. Fiz. Tech. Poluprov 22, 1979 (1988) - Engl. Transl.: Sov. Phys. Semicond 22. 1254 (1988).
105. D.I. Aladashvili, Z. Adamia, K. Lavdovskii, E.I. Levin, B.I. Shklovskii, Frenkel-Pool effect in hopping conduction of weakly compensated semiconductors, Fiz. Tekh. Poluprov 23, 213 (1989) - Engl. Transl: Sov. Phys. Semicond. 21, 132 (1989).
106. S.D. Baranovskii, B.I. Shklovskii, Two models of radiative recombination in disordered semiconductors, Fiz. Tech. Poluprov 23 146 (1989) - Engl. Transl.: Sov. Phys.-Semicond. 23 88 (1989).
107. S.D. Baranovskii, B.I. Shklovskii, Temperature dependence of the line profile of photothermal ionization of impurities in a highly doped weakly compensated semiconductor, Fiz. Tekhn. Poluprov 23, 192 (1989) - Engl. Transl.: Sov. Phys. Semicond. 23, 122 (1989)

108. S.D. Baranovskii, H. Fritzsche, E.I. Levin, I.M. Ruzin, B.I. Shklovskii, Low temperature electronic transport and recombination in amorphous semiconductors, *Zh. Eksp. Teor. Fiz.* 96, 1362 (1989) - Engl. Transl.: *Sov. Phys. JETP* 70, (1989).
109. A.O. Orlov, A.K. Savchenko and B.I. Shklovskii, Evolution of fluctuational potential in the case of depletion in a channel of a field GaAs transistor, *Fiz. Tekhn. Poluprov.* 23 1334 (1989)- Engl. Transl.: *Sov. Phys.-Semicond.* 23 830 (1989).
110. B.I. Shklovskii, H. Fritzsche and S.D. Baranovskii, Recombination and photoconductivity in amorphous semiconductors at low temperature, *Proc. of Intn'l Conf. on Physics of Amorphous and Liquid Semiconductors*, Ashville, 1989, North Holland.
111. Qui-yi Ye, B.I. Shklovskii, A. Zrenner, F. Koch and K. Ploog, Negative magnetoresistance for hopping transport in n -doped layers, *Phys. Rev.* B41, 8477 (1990).
112. M.E. Raikh, S.D. Baranovskii and B.I. Shklovskii, On the dimensional quantization in a -Si:H quantum well structures: The alloy model, *Phys. Rev.* B41, 7701 (1990).
113. I.M. Ruzin, B.I. Shklovskii, Theory of hopping photoconductivity at low-frequency excitation, *Fiz. Tekhn. Poluprov.* 23. 1881 (1989) - Engl. Transl. *Sov. Phys.-Semicond.* 23, (1989).
114. D.I. Aladashvili, Z. Adamia, K. Lavdovskii, E.I. Levin and B.I. Shklovskii, Non-Ohmic hopping conductivity of weakly compensated semiconductors, *Fiz. Tekhn. Poluprov.* 24; (1990) - Engl. Transl: *Sov. Phys.-Semicond.* 24 (1990).
115. B.I. Shklovskii and B.Z. Spivak, Interference phenomena in variable range hopping conductivity in "Hopping and related phenomena", edited by H. Fritzsche and M. Pollak, 1990, World Scientific Publishing Company.
116. D.I. Aladashvili, Z.A. Adamiya, K.G. Lavdovskii, E.I. Levin and B.I. Shklovskii, High field hopping and negative differential conductance in weakly compensated silicon, in "Hopping and related phenomena", ed. by H. Fritzsche and M. Pollak, 1990, World Scientific.
117. B. I. Shklovskii, E.I. Levin, H. Fritzsche and S.D. Baranovskii, Hopping photoconductivity in amorphous semiconductors: Dependence on temperature, electric field and frequency in "Transport, correlation and structural defects", edited by Hellmut Fritzsche, 1990, World Scientific.
118. Yu. M. Galperin, Anjun Jin, B.I. Shklovskii, Acoustoelectric effect in systems with localized states, *Phys. Rev.* B44, 5497 (1991).
119. E. I. Levin, M.E. Raikh and B.I. Shklovskii, Impurity Band Structure of the n -doped semiconductor in the low density, *Phys. Rev.* B44, 11281 (1991).
120. L. I. Glazman, I. M. Ruzin, B.I. Shklovskii, Quantum transport and pinning of one-dimensional Wigner crystal, *Phys. Rev.* 45, 8454 (1992).
121. E. I. Levin S. Marianer and B.I. Shklovskii, Luminescence lifetime distribution in amorphous semiconductors, *J. Non Crystalline Solids* 137/138, 559 (1991).

122. E. I. Levin, S. Marianer and B.I. Shklovskii, Photoluminescence of amorphous silicon at low temperatures. Computer simulation, Phys. Rev. 45, 5906 (1992).
123. D. B. Chklovskii, B. I. Shklovskii and L.I.Glazman, Electrostatics of edge states Phys. Rev. B 46, 4026 (1992)
124. S.Marianer, B.I Shklovskii, Effective temperature of hopping electrons in a strong electric field, Phys. Rev. B 46, 13100 (1992)
125. I.M.Ruzin, S.Marianer, B.I.Shklovskii, Pinning of two dimensional Wigner crystal by charged impurities, Phys. Rev. B46, 3999 (1992)
126. B.I.Shklovskii, B.Shapiro, B.R.Sears, P Lambrianidis, H.B.Shore, Statistics of spectra of disordered systems near the Metal-Insulator transition, Phys. Rev.B47, 11487 (1993)
127. D.B. Chklovskii, K.A. Matveev, B.I Shklovskii, Ballistic conductance of interacting electrons, Phys. Rev. B47, 12605 (1993)
128. D.G.Polyakov, B.I.Shklovskii, Variable range hopping as the mechanism of the conductivity peaks broadening, Phys. Rev. Lett. 70, 3796 (1993)
129. D.G.Polyakov, B.I. Shklovskii, Conductivity peak broadening in the quantum Hall regime, Phys. Rev. B47 (1993)
130. D. G. Polyakov, B. I. Shklovskii, "Conductivity peak broadening in the quantum Hall regime", Physica A 200, 476 (1993)
131. A. K. Evans, L. I. Glazman, B. I. Shklovskii, "Coulomb blockade in the quantum Hall state," Phys. Rev. B48, 11120 (1993).

Boris Shklovskii. Professor of Physics, University of Minnesota. Verified email at umn.edu - Homepage.Â Colloquium: the physics of charge inversion in chemical and biological systems. AY Grosberg, TT Nguyen, BI Shklovskii. Reviews of modern physics 74 (2), 329, 2002. 1046. 2002. The Los Angeles Review of Books is a 501(c)(3) nonprofit. Help us create the kind of literary community youâ€™ve always dreamed of. Donate to support new essays, interviews, reviews, literary curation, our groundbreaking publishing workshop, free events series, newly anointed publishing wing, and the dedicated team that makes it possible. \$250 \$500 \$1000 \$2500 \$5000. CUSTOM AMOUNT.