

## LIST OF REFERENCES

- Abramowitz ,I. A. Stegun, (1964)"Mathematical Functions with Formulas, Graphs, and Mathematical Tables" U.S. Government Printing Office, Washington, DC
- Abdellatif G., H. Imam, (2002) Spectrochim Acta Part B **57** 1155-1165
- Afaf M. Abdel Hameed, G.H.Abo-Koura, I.M. Azzouz and Yosr E.E-D Gamal, (2001)Proceeding of XXV ICPIG 17<sup>th</sup> -22<sup>nd</sup> July Nagoya- Japan, **2**, 243
- Ameer-Beg S.,W. Perrie, S. Rathbone, J. Wright, W.Weaver, H. Champoux, (1998) Appl. Surf.Sci., vol. 127-129
- Anisimov S. and V. Khokhlov, (1995)" Instabilities in Laser Matter Interaction" CRC Press, Boca Ration.
- Apostolova T. and Y. Hahn, (2000) Journal of Applied Physics .**88**, 2,1024
- Arnold D., F. Carter, and D.J. DiMaria, (1992)Phys. Rev. B **45** 3,1477
- Arnold D., and E. Cartier, (1991) Phys. Rev. B **44** 10689
- Arnold D. and , E. Cartier, (1992)Phys. Rev. B **46** 15102
- Bebb H B and Gold A , (1966) Phys. Rev. . 143 . 1-24
- Becker M.F. ,J.R. Brock,H. Cai, D.E. Henneke, J.W.Keto, J. Lee, W.T. Nichols, H.D. Glicksman, (1998) 10 853-863
- Bettis J. R.,R. A. House, and A. H. Guenther, (1976)NBS Spec. Pub., vol. **462**, pp 338- 345
- Bien-Aime K.,J. Neauport, I. Tovena-Pecault, E. Fargin, C.Labrugere, C. Belin, and M. Couzi,(2009)APPLIED OPTICS,Vol.**48**,No. 12
- Birngruber R., Puliafito C.A., Gawande A.,Lin WZ, Schoenlein RW and Fujimoto JG, (1987) IEEE J Quant. Electron. QE-**23**,1836-1844
- Bloembergen N., (1974) IEEE J. Quantum Electron. QE-**10**,375

- Bogaerts Annemie , Zhaoyang Chen, Renaat Gijbels , Akos Vertes (2003) Spectrochimica Acta Part B 58 1867-1893
- Carr C. W.,M. D. Feit, A.M. Rubenchik, P. De Mange, S. O. Kucheyev, M. D. Shirk, H. B. Radousky and S. G. Demos .(2005)Optics Letters, Vol.30,No.6
- Chrissey D.B.,G.K. Hubler (Eds.) "(1994)Pulsed Laser Deposition of Thin Films" Wiley, New York
- Chylek P. , Jarzembski M. A. , Srivastava V. , Pinnick R. G. ,(1990) Appl. Opt. **29**, 2303 -2306
- Cohn D R, M p Hacker, B Lax and W, J. Harverson (1975)Appl. Phys. 46(2), 668
- Davis K. M., K. Miura, N. Sigumoto, K. Hirao, (1996)Opt. Lett., **21**,1729
- Demichelis C,(1969) IEEE. J. Q. E., QE-5, 188
- Docchio F., (1998) Europhys. Lett. **6**,407
- Du D., X. Liu, G. Korn, J. Squier, and G. Mourou, (1994) Appl. Phys. Lett., **64**, 23 , 3071
- Efimov O. M., (2004) J.Opt. Technol. **71**,6,338
- Evans C. J and Yosr E.E Gamal, (1984) J. Phys. D: Appl.Phys. **17**,691 8
- Fan C. H., J. Sun, and J. P. Longtin, (2001) Appl.Opt. **40** 3124
- Fan C. H., J. Sun, and J. P. Longtin, (2002)Journal of Applied Physics.**91**,4, 2530
- Fischetti M.V., D.J.Dimaria, S.D. Brorson, T.N. Theis, and J. R. Kirtley, (1985)Phys.Rev. B **31** 8124
- Fradin D. W., and N. Bloembergen, J. P. Letellier, (1973)Appl. Phys. lett.**22**, 636
- Gamal Y E E-D. ( 1978) ,Ph. Thesis, Univ. of Swansea, UK
- Gamal Yosr E.E- D ,M. S-D Shafik and Jamal M. Daoud, (1999) J. Phys. D: Appl. Phys. **32**,4 423
- Gamal Yosr E.E- D and I. M. Azzouz, (2001) J. Phys. D: Appl. Phys. **34**, 1
- Glezer E. N., M. Milosavijevic, L. Huang, R. J. Finlay, T. H. Her, J. P. Callan, and E. Mazur, (1996) Opt. Lett. **21**,2023
- Gold A. and Bebb H. B. ,(1965)Phys .Rev .Lett.14,60
- Gerald.C.F. and P.O. Wheatley , (1989). Applied Numerical Analysis , 4<sup>th</sup> ed. ( Addison – Wesley , New York , )

- Grey Morgan C(1975) , Rep. Progr. Phys. **38**, 621-65
- Gudde J., J. Hohlfeld , and J.G. Muller, E. Matthias, (1998)Appl. Surf. Sci. **40**. 127-129
- Hafez M.A. ,M.A. Khedr, F.F. Elaksher, Y.E. Gamal, (2003) Plasma Sources Sci. Technol. **12** 185-198
- Haglund R. F.,Jr.,N. Itoh . (1994) "Laser Ablation Principles and Applicatons"ed by J.C.Miller(Springer,Berlin Heidelberg New York)
- Holway L. H. Jr.and D. W. Fradin, , (1975) J. Appl. Phys. **46**,1,279
- Homoelle D., S. Wielandy, A. L. Gaeta, N. F. Borrelli, and C. Smith, (1999)Opt. Lett. **24**, 1311
- Huang C.,Y. Xue,Z. Xia, Y.Zhao ,F. Yang, and P.Guo,(2009)Chinese Optics, Lett.,Vol.**7** No.1
- Itina T.E,L.V. Zhigilei, and B.J. Garrison, (2002) J. Phys. Chem. **106**, 303-310
- Jasapara J., A. V. V. Nampoothiri, and W.Rudolph, (2001) Phys. Rev. **63**,4 045117-1
- Jones S. C., P. Braunlich, R. T. Casper, X. A. Sheen, and P. Kelly, (1989)Opt. Eng. **28** 10, 1039
- Kabashin A.V., A. Trudeau, W. Marine, and M. Meunier, , (2008)Appl. Phys. A **91**,621
- Kaiser A., B.Rethfeld, M.Vicanek and G Simon. (2000)The American Physical Society. **61**,17,11 437
- Keldysh L. V., (1965) Sov. Phys. JETP **20**, 1307
- Kelley P.L., (1965)Phys.Rev.Lett.**15**,1005
- Kennedy P. K., (1995)IEEE J. Quantum Electron. **31**, 2241
- Kennedy P. K.,Hammer D.X.,Rockwell B.A., Prog. (1997)IEEE J.Quantum Electron. **21**, 155
- Klein M V , (1969)."Optics" (London :Wiley) .
- Kroll N and Watson K M , ( 1972)Phys. Rev. A. **5**,1883-1905
- Kudryashov S. I., (2006)Proc. of SPIE. **5991**, 59910T-1
- Lee S., J.L. Bull and A.J. Hunt, (2007)Appl. Phys.**91**,023111

- Lenzner M., J. Kroger, S. Sartania, Z. Cheng, Ch. Spielmann, G. Mourou, W. Kautek and F. Krausz, (1998) Phys. Rev. Lett. **80**, 4076
- Li M., S. Menou, J. P. Nibayer, and G. N. Gibson, (1999) Phys. Rev. Lett. **82**, 2394
- Liu X. D. Du, and G. Mourou (1997) IEEE Journal of Quantum Electronics, **33**, 10,1706
- Liu Yi, Hongbing Jiang, Quan Sun, Zhaoxin Wu, Hong Yang and Qihuang Gong., (2005) J.Opt. A: Pure Appl. Opt. **7**,198
- Loesel F. H., J. P. Fischer, M. H. Gotz, C. Horvath, T. Juhasz, F. Noack, N. Suhm, and J. F. Bille, (1998) Appl. Phys. B **66**,121
- Mao S.S.,F.Quere, S.Guizard,X.Mao,R.E.Russo,G. Petite, P.Martin, (2004) Appl. Phys.A **79**,1695-1709
- Marcinkevicius A.,S. Juodkazis, M. Watanabe. M. Miwa, S. Matsuo, H. Misawa and J. Nishii, ( 2001) Opt. Lett. **26**, 277-279
- Mazhukin V. I., V. V. Nossov, M. G. Nickiforov and I. Smurov, (2003) Journal of Applied Physics. **93**,1,56
- MendesRibeiro R., M.M.D. Ramos, A.M. Stoneham, (1998) Comp. Mater. Sci. 10 33-37
- Nemes L.,A. M. Keszler, J. O.Hornkkohl and C.G. Parigger, (2005) APPLIED OPTICS Vol. 44, No. 18
- Noack J. and A. Vogle, (1999) IEEE J. Quantum Electron. **35**,1156
- O'Dwyer J.J. (1973) "The Theory of Electrical Conduction and Breakdown in Solids and Dielectrics" (Clarendon, Oxford).
- Oh Young Main, S. H. Lee, S. Park and J. S.Lee, (2006) International Journal of Heat and Mass Transfer, **49**,1493
- Ohmura E. and I. Fukumoto, (1996) Int. J. Jpn. Soc. Prec.Eng. **30**, 128-133
- Ohmura E., I. Fukumoto,I. Miyamoto, (1998)Int. J. Jpn. Soc. Prec.Eng. **32**, 248-253
- Otobe T., M. Yamagiwa, J.I. Iwata, K. Yabana, T. Nakatsukasa and G.F. Bertsch, (2008) Phys. Rev. B **77**, 165104
- Peng Y. ,Y. WEL and L. V.Zhenlong, (2004) Optica Applicat, **34**,3, 319
- Perry M. D., B.C.Stuart, P.S.Banks,H.T. Nguyen, M.D. Feit, A.M.Rubenchik and J.A.Sefcik, (1998)UCRL-ID-132159
- Petite G., P. Daguzan, S. Guizard, and P. Martin, (1996)Methods Phys. Rev. Nucl. Instrum.B **107**,97

- Phelps A V , ,(1966) "Phys. of Quan. Electronics", edited by P L Kelley, B Lax and Tannenwald (McGraw-Hill, New York, N. Y.)PP 538.E
- Pronko P., S. Dutta, J. Squier, J. Rudd, D. Du, and G. Mourou, (1995) Opt. Commun., vol. 114, pp. 106-110,
- Pronko P.P., P.A.VanRompay, C.Horvath, F.Loesel,T. Juhasz, X.Liu and G.Mourou (1998)Phys. Rev.B. **58**, 5,2387
- Qiu T.Q. and C.L. Tien, (1993) J. Heat Transfer **115**, 835-841
- Quoix C., G. Grillon, A. Antonetti, J. P. Geindre, P. Audebert, and J. C. Gauthier, (1999) Eur. Phys. J.: Appl.Phys. **5**, 163
- Radziemski L. J., and D. A. Cremers, (1989)"Laser-Induced Plasmas and Applications" ( Marcel Dekker,New York).
- Radziemski L. J., (2002) Spectrochim. Acta Part B **57** 1109-1113
- Raizer Y. P.,(1966) Soviet Phys. Uspekhi, Vol. 8, No. 5, PP. 650
- Ready J.F., (1971)"Effects of High Power Laser Radiation " (Academic Press, New York).
- Reitze, D. H., H. Ahn and M.C. Downer, (1992)Phys.Rev. **45**,2677
- Rosen D.I., J. Mitteldorf, G. Kothandaraman, A. N. Pirri and E. R. Pugh (1982) J.Appl. Phys. **53**,3190
- Rosen D I and Weyl I G, (1987) J . Phys . D: Appl.**20** 1264- 1276,
- Sacchi C A , (1991) J.Opt. Soc. Am. B,Vol. 8, No. 2, PP. 337-345,
- Samek O, A. Kurowski ,S. Kittel ,S. Kukhlevsky and R. Hergenroder. (2005)Spectrochimica Acta Part B **60**, 1225-1229
- Santiago J and Robinson A . M , ,(1980)Canadian Journal of Physics **58**, 2
- Sato S, Ogura M. Ishihara M, Kaawauchi S, Arai T, Matsui T Kurita A, Obara M, Kikuchi M and Ashida H., (2001) Lasers in Surgery and Medicine. **29**, 464
- Schittenhelm H.,G. Callies, P. Berger and H. Hugel, (1996) J.Phys. D **29**, 1564
- Schittenhelm H.,G. Callies, P. Berger, H. Hugel, (1997) App. Surf. Sci. 109-110.494
- Schaffer C. B., A. Brodeur and E. Nazur, (2001) Meas.Sci.Technol. **12**,1784
- Seideman T.,M.Y. Ivanov and P.B. Corkum,(1995)Phys. Rev.Lett. **75**,2189

- Sheila G., M. Sjoberg, M. L. Quiroga-Teixeiro and S. Hard (2003)Applied Optics  
Vol.42,No.3
- Shen Y.R. ,(1984)"The principles of Nonlinear Optics" Wiley ,New York
- Smith W. L., (1978) Opt. Eng. **17**,489
- Smith D. C. and R. G.Meyerand,(1976). "Principles of Laser Plasmas" ed. G. Bekefi.  
(John Wiley and New York).11 457
- Smith A., B. Do, M. Soderlund, (2007) Proc.SPIE Vol. 6453,645317
- Sparks M., D. L. Mills, R. Warren, T. Holstein, A. A. Maradudin, L. J. Sham, E. Loh  
Jr. and D. F. King, (1981)Phys. Rev. B**24**,6, 3519
- Spitzer L J R . ,(1965) "Phys .of Fully Ionized Cases" , (Interscience Publishers, New  
York ,Wiley), 133
- Stoneham A.M., M.M.D. Ramos and R.M. Ribeiro, (1999) Appl. Phys. A 69 S81-S86
- Strickland D. and G. Mourou, (1985) Opt. Commun. **56**, 219
- Stuart B. C., S. Herman B. w. Shore, and M. D.Perry, (1994) "in High Field  
Interaction and Short Wavelength Generation" (OSA Technical Digest  
Series Washington,D.C.), **16**, 228
- Stuart B. C., M. D. Feit, A. M. Rubenchik, B. W. Shore and M. D. Perry, (1995)  
Phys Lett. **74**, Rev. 2248
- Stuart B. C., M. D. Feit, A. M. Rubenchik, B. W. Shore and M. D.Perry , (1996)  
Phys. Rev. B **53**, 4,1749
- Sudrie L., M. Franco B. Prade, and A. Mysyrowicz, (1999)Opt. Commun. **171**, 279
- Sun J. and J. P. Longtin,. (2001) Journal of Applied Physics,**89**, 12,8219
- Sun Q., H. Jiang, Y. Liu, Z. Wu,H. Yang and Q. Gong, (2005) Opt. Let. Vol **30**, 3
- Temnov V.V.,K.Sokolowski-Tinten,P.Zhou,B.Rethfeld,V.E.Gruzdev,A.El-Khamawy, and D.von der Lind (2004)SPIE vol.5448
- Tien An-Chun, S. Backus, H. Kapteyn, M. Murnane and G. Mourou. (1999)Physical  
Rev. Let. **82**, 19,3883
- Ueta M. ,H.Kanzaki,K.Kobayashi,Y. Toyozawa, E.Hanamura(ets.) (1986)  
"Excitonic Processes in Solids" Springer,Berlin Heidelberg New York
- Varel H., D. Ashkenasi, A. Rosenfeld, R. Herrmann, F. Noack, and E. Campbell,  
(1996) Appl.Phys. A **62**, 293

- Vasil'ev A. N. ,Y.Fang and V.V.Mikhailin, (1999)Phys.Rev.B **60**,5340
- Vatsya S.R.and Nikumb S. K, J. ,(2002) Appl. Phys.Vol.**91**,344-351
- Vazquez de Aldana J. R.,C. Mendez, L.Roso and P. Moreno. (2005) J.Phys. D:Appl.Phys.**38** 2764-2768
- Vertes A., R. Gijbels and F.Adams ,(1993)"Laser Ionization Mass Analysis" (Wiley, New York).
- Vijayalakshmi S.,M.A.George,J.Sturmann and H.Grebel, (1998)Appl. Surf.Sci. 127-129378-382.
- Von der Linde D. and H.Schuler, (1996) J. Opt. Soc. Am.B **13**, 1 216
- Watanabe K.and T. Iguchi, (1999) Appl. Phys. A **69**, S845
- Watanabe M., S.Juodkazis, H. Sun , S. Matsuo and H. Misawa. (2000)Appl. Phys.Lett. **77**, 13
- Wellershoff S. S., J. Hohlfeld, J. Gudde and E. Matthias, (1999) Appl. Phys. A **69** [Suppl.], S99-S107
- Winefordner J.D. ,I.B. Gornushkin, D. Pappas, O.I.Matveev and B.W. Smith, (2000) J. Anal. At. Spectrom. **15** 1161-1189
- Winkler S. W.,I. M. Burakov, R. Stoian, N. M. Bulgakova, A. Husakou, A. Mermilliod-Blondin, A. Rosenfeld, D. Ashkenasi and I. V. Hertel, (2006) App. Phys. A**84**,413
- Wu A. Q.,I. H. Chowdhury, X. Xu, (2005) Phys. Rev. B **72**, 085128
- Xu S.Z., Jia T.Q., H.Y. Sun, C.B. Li ,X.X. Li, D.H. Feng, J.R. Qiu and Z.Z. Xu, (2006) Optics Communications 259 274-280
- Yablonovitch E. and N. Bloembergen . (1972)Phys.Rev.Lett. **29**,907
- Yoo J.H.,S.H. Jeong, R. Greif and R.E. Russo, (2000)J. Appl. Phys. **88** ,1638
- Yudin G. L., L.N. Gaier, M. Lein, P.L. Knight, P.B. Corkum and M.Y. Ivanov, (2004) Laser Phys. **14**,51
- Zel'dovich Y. B. and Raizer Y. P. , (1965) Sov.Phys. JETP, **20**, 772- 780
- Zhang Z.,Z-X. Han and G.S. Dulikravich, (2001)J. Appl. Phys. **90**, 5889
- Zhigilei L.V., E.Leveugle, B.J. Garrison, Y.G. Yingling M.I. Zeifman, (2003)Chem. Rev. **103**, 321-347