

## Muhammad Hanif

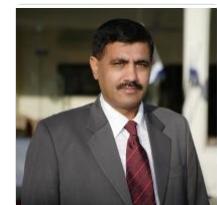
Adjunct Faculty

College of Electrical & Mechanical Engineering

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## About

Dr. Muhammad Hanif is working as Adjunct Faculty in the College of Electrical & Mechanical Engineering. Dr. Muhammad Hanif has a PhD in Physics/Laser Spectroscopy. Dr. Muhammad Hanif has published 36 research articles & conference papers having a citation count of 321, carried out 0 projects and filed 0 intellectual property.

## Qualifications

<b>PhD in Physics/Laser Spectroscopy</b>	1997 - 2001
Quaid-i-Azam University , Pakistan	
<b>MPhil in Solid State Physics</b>	1988 - 1990
University of the Punjab , Pakistan	
<b>MSc in Physics</b>	1985 - 1987
Islamia University of Bahawalpur , Pakistan	
<b>BSc in Physics, Math A &amp; B</b>	1982 - 1984
BZU, Multan , Pakistan	

## Experience

<b>Adjunct Faculty</b>	2020- Present
College of Electrical & Mechanical Engineering	
<b>Adjunct Faculty</b>	2019 - 2020
College of Electrical & Mechanical Engineering	
<b>Instr CI 'A'</b>	2008 - 2016
MCS (NUST) , MCS, Rawalpindi	
<b>Post Doctorate</b>	2007 - 2008
University of Glasgow , United Kingdom	
<b>Visiting Research Fellow</b>	2002 - 2007
Quaid-i-Azam University , Quaid-i-Azam University, Islamabad	
<b>Instr CI 'B'</b>	2002 - 2007
NUST College of E&ME , College of E&ME, Peshawar road Rawalpindi	
<b>Instr CI</b>	2001 - 2002
PMA,Kakul , PMA,Kakul	
<b>GSO-III (Edn)</b>	1995 - 1997
HQ 328 Bde , HQ 328 Bde	
<b>Instr C 'C'</b>	1993 - 1995
Military College Jhelum , Military College Jhelum	
<b>GSO-III (Edn)</b>	1991 - 1993
HQ Multan Log Area , HQ Multan	

## Research Articles

**Emission Studies of Silicon Plasma Produced by Nd: YAG Laser**

2018

*Muhammad Hanif M. Salik*

*Silicon* , Volume: 10 Issue: 3 Pages: 1067-1075

**Impact Factor: 1.210 | Quartile: 4 | Citations: 2**

**Spectroscopic Studies of Indium Plasma Produced by Fundamental (1064 nm) and Second (532 nm)**

**Harmonics of an Nd: YAG Laser**

Muhammad Hanif M. Salik M. A. Baig

*Journal of Russian Laser Research*, Volume 39, Issue 1, Pages 37-45

**Impact Factor:** 0.777 | **Quartile:** 4

**DOI:** 10.1007/s10946-018-9687-3

**Laser based diagnostics of slaked lime plasma**

M. Salik Muhammad Hanif J. Wang X.Q. Zhang

*OPTIK*, Volume: 127 Issue: 4 Pages: 1940-1945

**Impact Factor:** 0.835 | **Quartile:** 4 | **Citations:** 4

**DOI:** 10.1016/j.jleo.2015.11.112

**Spectroscopic studies of sodium nitrate plasma produced by nanosecond laser ablation**

Muahmmad Salik Muhammad Hanif J.wang X. Q. Zhang

*Radiation Effects and Defects in Solids*, Volume: 171, Issue: 3-4, Pages: 259-270

**Impact Factor:** 0.443 | **Quartile:** 4

**DOI:** 10.1080/10420150.2016.1179306

**Laser plasma interaction during visible and IR laser ablation of chromite mineral target**

Muhammad Salik Muhammad Hanif J. Wang X. Q. Zhang

*High Energy Chemistry*, Volume 49, Issue 5, Pages 361-366

**Impact Factor:** 0.690 | **Quartile:** 4 | **Citations:** 1

**DOI:** 10.1134/S0018143915050112

**Diagnostics of Zinc-Selenium plasma produced by Nd:YAG laser**

Muhammad Hanif Muhammad Salik Fahim Arif

*Optics and Spectroscopy*, Volume: 119, Issue: 1, Pages: 7-15

**Impact Factor:** 0.644 | **Quartile:** 4 | **Citations:** 1

**DOI:** 10.1134/S0030400X15070127

**Diagnostics of Tin Plasma Produced by Visible and IR Nanosecond Laser Ablation**

Muhammad Hanif M.Salik

*Contributions to Plasma Physics*, Volume 55, Issue 4, Pages 290-298

**Impact Factor:** 1.255 | **Quartile:** 3 | **Citations:** 1

**DOI:** 10.1002/ctpp.201400055

**Spectroscopic study of carbon plasma produced by the first (1064 nm) and second (532 nm) harmonics of Nd:YAG laser**

Muhammad Hanif M. Salik Fahim Arif

*Plasma Physics Reports*, Volume: 41 Issue: 3 Pages: 274-280

**Impact Factor:** 1.010 | **Quartile:** 3 | **Citations:** 6

**DOI:** 10.1134/S1063780X15030034

**Optical emission characterization of laser ablated zirconium plasma**

Muhammad Hanif M. Salik

*Optics and Spectroscopy*, Volume: 118, Issue: 4, Pages: 631-638

**Impact Factor:** 0.644 | **Quartile:** 4 | **Citations:** 3

**DOI:** 10.1134/S0030400X15040062

**Optical Emission Studies of Molybdenum Plasma Produced by an Nd:yag Laser**

Muhammad Hanif M. Salik

*Journal of Russian Laser Research*, Volume: 35 Issue: 3 Pages: 230-238

**Impact Factor:** 0.546 | **Quartile:** 4 | **Citations:** 11

**DOI:** 10.1007/s10946-014-9417-4

**Spectroscopic characterization of laser-ablated manganese sulfate plasma**

M. Salik Muhammad Hanif J. WANG X. Q. ZHANG

*Laser and Particle Beams*, Volume: 32 Issue: 1 Pages: 137-144

**Impact Factor:** 1.295 | **Quartile:** 3

**DOI:** 10.1017/S0263034614000020

**Optical emission studies of sulphur plasma using laser induced breakdown spectroscopy**

Muhammad Hanif M. Salik

2018

2016

2016

2015

2015

2015

2015

2015

2014

2014

2014

**Spectral studies of nanosecond laser interaction with magnesium sulfate target in air**

*Muhammad Salik Muhammad Hanif Jiasheng Wang*

*Journal of Plasma Physics*, Volume: 80 Pages: 67-80 Part: 1

**Impact Factor:** N/A | **Citations:** 2

**DOI:** 10.1017/S0022377813000986

**Peristaltic transport of a Maxwell fluid in a porous asymmetric channel through a porous medium**

*Safia Akram Muhammad Hanif S. Nadeem*

*Cogent Engineering*, Volume 1, Issue 1

**Impact Factor:** 0 | **Citations:** 9

**DOI:** <http://dx.doi.org/10.1080/23311916.2014.980770>

**Laser Based Optical Emission Studies of Zinc Oxide (ZnO) Plasma**

*Muhammad Hanif Muhammad Salik Muhammad Anwar Baig*

*Plasma Chemistry and Plasma Processing*, Volume: 33 Issue: 6 Pages: 1167-1178

**Impact Factor:** 1.599 | **Quartile:** 2 | **Citations:** 11

**DOI:** 10.1007/s11090-013-9478-0

**Laser-induced breakdown spectroscopic study of ammonium nitrate plasma**

*Muhammad Hanif M. Salik M. A. Baig*

*Plasma Physics Reports*, Volume: 39 Issue: 12 Pages: 1019-1025

**Impact Factor:** 0.747 | **Quartile:** 3 | **Citations:** 4

**DOI:** 10.1134/S1063780X13120040

**Numerical and analytical treatment on peristaltic flow of Williamson fluid in the occurrence of induced magnetic field**

*Safia Akram S. Nadeem Muhammad Hanif*

*Journal of Magnetism and Magnetic Materials*, Volume: 346 Pages: 142-151

**Impact Factor:** 2.002 | **Quartile:** 2 | **Citations:** 52

**DOI:** 10.1016/j.jmmm.2013.07.014

**Plasma properties of nano-second laser ablated iron target in air**

*Muhammad Hanif Jiasheng Wang Xiqing Zhang Muhammad Salik*

*International Journal of Physical Sciences*, Vol. 8(35), pp. 1738-1745

**Impact Factor:** 0

**DOI:** 10.5897/IJPS2013.3902

**Diagnostics of a Potassium Plasma Produced by Visible and IR Nanosecond Laser Ablation**

*M. Salik Muhammad Hanif J. Wang X. Q. Zhang*

*Journal of Russian Laser Research*, Volume: 34 Issue: 4 Pages: 323-330

**Impact Factor:** 0.606 | **Quartile:** 4

**DOI:** 10.1007/s10946-013-9357-4

**Diagnostic Study of an Fe-Ni Alloy Plasma Generated by the Fundamental (1064 nm) and Second (532 nm) Harmonics of an Nd: YAG Laser**

*Muhammad Hanif Muhammad Salik Muhammad Aslam Baig*

*Plasma Science and Technology*, Volume 15, Issue 5, Pages 397-402

**Impact Factor:** 0.596 | **Quartile:** 4 | **Citations:** 2

**DOI:** 10.1088/1009-0630/15/5/01

**Laser-based optical emission studies of barium plasma**

*Muhammad Hanif M. Salik Nek M. Sheikh M. A. Baig*

*Applied Physics B-Lasers and Optics*, Volume: 110, Issue: 4, Pages: 563-571

**Impact Factor:** 1.634 | **Quartile:** 2 | **Citations:** 17

**DOI:** 10.1007/s00340-012-5293-1

**Optical spectroscopic studies of titanium plasma produced by an Nd : YAG laser**

*Muhammad Hanif M. Salik M. A. Baig*

*Optics and Spectroscopy*, Volume 114, Issue 1, Pages 7-14

**Impact Factor:** 0.673 | **Quartile:** 4 | **Citations:** 23

**DOI:** 10.1134/S0030400X13010116

2014

2014

2013

2013

2013

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2013

**Diagnostic Study of Nickel Plasma Produced by Fundamental (1064 nm) and Second Harmonics (532 nm) of an Nd: YAG Laser**

2012

Muhammad Hanif M. Salik M. A. Baig

*Journal of Modern Physics*, Volume 3, No 10A

**Impact Factor:** 0

**DOI:** <http://dx.doi.org/10.4236/jmp.2012.330203>

**Quantitative studies of copper plasma using laser induced breakdown spectroscopy**

2011

Muhammad Hanif M. Salik M.A. Baig

*Optics and Lasers in Engineering*, Volume: 49 Issue: 12 Pages: 1456-1461

**Impact Factor:** 1.838 | **Quartile:** 2 | **Citations:** 60

**DOI:** [10.1016/j.optlaseng.2011.06.013](https://doi.org/10.1016/j.optlaseng.2011.06.013)

**Plasma Diagnostic Study of Alumina (Al<sub>2</sub>O<sub>3</sub>) Generated by the Fundamental and Second Harmonics of a Nd:YAG Laser**

2011

M. Salik Muhammad Hanif M. A. Baig

*IEEE Transactions on Plasma Science*, Volume: 39 Issue: 9 Pages: 1861-1867

**Impact Factor:** 1.174 | **Quartile:** 3 | **Citations:** 17

**DOI:** [10.1109/TPS.2011.2159852](https://doi.org/10.1109/TPS.2011.2159852)

**Spectroscopic Studies of the Laser Produced Lead Plasma**

2011

Muhammad Hanif M. Salik M. A. BAIG

*Plasma Science and Technology*, Volume: 13, Issue: 2, Pages: 129-134

**Impact Factor:** 0.407 | **Quartile:** 4 | **Citations:** 22

**DOI:** [10.1088/1009-0630/13/2/01](https://doi.org/10.1088/1009-0630/13/2/01)

**Laser-Optogalvanic Studies of the 4p5 ns and nd Autoionizing Resonances in Krypton**

2008

M.A baig Muhammad Hanif Muhammad Aslam

*Journal of Physics B-Atomic Molecular and Optical Physics*, Volume: 41 Issue: 3 Article Number: 035004

**Impact Factor:** 2.089 | **Quartile:** 1 | **Citations:** 3

**DOI:** [10.1088/0953-4075/41/3/035004](https://doi.org/10.1088/0953-4075/41/3/035004)

**Laser Optogalvanic observations and MQDT analysis of mp(5)nd J = 3 autoionizing resonances in Ar, Kr and Xe**

2006

M A Baig Muhammad Hanif M Aslam S A Bhatti

*Journal of Physics B-Atomic Molecular and Optical Physics*, Volume: 39 Issue: 20 Pages: 4221-4229

**Impact Factor:** 2.024 | **Quartile:** 1 | **Citations:** 8

**DOI:** [10.1088/0953-4075/39/20/019](https://doi.org/10.1088/0953-4075/39/20/019)

**Laser Optogalvanic Measurements and line-shape analysis of the 5p5 7p and 5p5 4-5f Autoionizing Resonances in Xenon**

2005

Muhammad Hanif M Aslam M Riaz S A Bhatti M A Baig

*Journal of Physics B, Atomic, Molecular and Optical Physics*, Volume: 38 Issue: 2 Pages: S65-S75 Special Issue: SI

**Impact Factor:** 1.913 | **Quartile:** 2 | **Citations:** 14

**DOI:** [10.1088/0953-4075/38/2/005](https://doi.org/10.1088/0953-4075/38/2/005)

**Experimental and Theoretical Investigation of Odd 5p5 ? nl Autoionizing Resonances in Xenon Atoms; Energy Dependence of the Reduced Width**

2004

Muhammad Hanif M Aslam Raheel Ali S A Bhatti M A Baig D Klar M-W Ruf I D Petrov V L Sukhorukov H Hotop

*Journal of Physics B: Atomic, Molecular and Optical Physics*, Volume: 37 Issue: 10 Pages: 1987-2009

**Impact Factor:** 1.761 | **Quartile:** 2 | **Citations:** 19

**DOI:** [10.1088/0953-4075/37/10/001](https://doi.org/10.1088/0953-4075/37/10/001)

**Laser optogalvanic spectroscopy of 5p5nf J = 1-5 even-parity Rydberg levels of xenon**

2000

Raheel Ali Ali Nadeem M Riaz S A Bhatti M A Baig M Aslam Muhammad Hanif

*Journal of Physics B: Atomic, Molecular and Optical Physics*, Volume 33

**Impact Factor:** 2.332 | **Quartile:** 1

**DOI:** [10.1017/S0263034614000020](https://doi.org/10.1017/S0263034614000020)

**High-resolution photoabsorption spectrum of copper in the 3d-subshell excitation region**

1997

M A Baig S A Bhatti J Hormes Muhammad Hanif

*Journal of physics B-atomic Molecular and optical physics*, Volume: 30 Issue: 23 Pages: 5381-5399

**Impact Factor:** 2.442 | **Quartile:** 1 | **Citations:** 6

**DOI:** [10.1088/0953-4075/30/23/007](https://doi.org/10.1088/0953-4075/30/23/007)

*M. Aslam Baig A. Rashid W. Dussa Ishaq Ahmad J. Hormes Muhammad Hanif*

*Physical Review A, Volume 45, No. 3, Pages 2108-2111*

**Impact Factor:** N/A | **Citations:** 6

**DOI:** 10.1103/PhysRevA.45.2108

## Conference Proceedings

### Laser Spectroscopic Characterization of Corundum Crystal Plasma

2019

*Muhammad Hanif*

*46th IOP Plasma Physics Conference, res.country(231,)*

**Citations:** N/A

**DOI:** [http://plasma2019.iopconfs.org/IOP/media/uploaded/EVIOPlasma\\_2019\\_Final\\_Programme.pdf](http://plasma2019.iopconfs.org/IOP/media/uploaded/EVIOPlasma_2019_Final_Programme.pdf)

### SPECTROSCOPIC STUDIES OF INDIUM PLASMA PRODUCED BY FUNDAMENTAL (1,064 nm) AND SECOND (532 nm) HARMONICS OF AN Nd:YAG LASER

2018

*Muhammad Hanif M. Salik M. A. Baig*

*2nd Asia-Pacific Conference on Plasma Physics, res.country(113,)*

**Citations:** N/A

**DOI:** 10.1007/s10946-018-9687-3

### Spectroscopic Studies of Silicon Plasma Produced by an Nd: YAG Laser

2017

*Muhammad Hanif*

*18th International Conference on Laser Aided Plasma Diagnostics (LAPD), res.country(56,)*

**Citations:** N/A

**DOI:** 10.1007/s12633-017-9573-6