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L. J. Mawst (M'88–SM'93)was born in Chicago, IL, in 1959. He received the B.S. degree in engineering physics and the M.S. and Ph.D. degrees in electrical engineering from the University of Illinois at Urbana- Champaign, Urbana-Champaign, in 1982, 1984, and 1987, respectively.

In 1987, he joined TRW, Inc., Redondo Beach, CA, where he was a Senior Scientist in the Research Center, and was engaged in design and development of semiconductor lasers using metal–organic chemical vapor deposition (MOCVD) crystal growth. He is the coinventor of the resonant optical waveguide (ROW) antiguided array and has contributed to its development as a practical source of high coherent power. He developed a novel single-mode edge-emitting laser structure, the ARROW laser, as a source for coupling high powers into fibers. **He is currently a Professor in the Electrical and Computer Engineering Department, University of Wisconsin-Madison, Madison**, where he is involved in the development of novel III/V compound semiconductor device structures, including vertical-cavity surface emitters (VCSELs), active photonic lattice structures, InGaAsN lasers, and high-power Al-free diode lasers. His current research on low-temperature MOCVD-grown highly strained InGaAs and InGaAsN led to record low threshold current density diode lasers. He is the author or coauthor of more than 175 technical papers and holds 19 patents. Prof. Mawst received the TRW Group Level Chairman's Award.

Total no. of Citation (without self-citation): >1000

1. Mawst LJ, Bhattacharya A, Lopez J, et al., "8 W continuous wave front-facet power from broad-waveguide Al-free 980 nm diode lasers," APPLIED PHYSICS LETTERS Volume: 69 Issue: 11 Pages: 1532-1534 Published: SEP 9 1996. **(citations: 75, exclude self-citation)**

2. BOTEZ D, MAWST LJ, PETERSON GL, et al., "PHASE-LOCKED ARRAYS OF ANTIGUIDES - MODAL CONTENT AND DISCRIMINATION," IEEE JOURNAL OF QUANTUM ELECTRONICS Volume: 26 Issue: 3 Pages: 482-495 **(Citations: 54, exclude self-citation)**

3. ZORY PS, REISINGER AR, WATERS RG, MAWST LJ et al., "ANOMALOUS TEMPERATURE-DEPENDENCE OF THRESHOLD FOR THIN QUANTUM-WELL ALGAAS DIODE-LASERS," APPLIED PHYSICS LETTERS Volume: 49 Issue: 1 Pages: 16-18 JUL 7 1986 **(Citations: 53, exclude self-citation)**

4. Al-Muhanna A, Mawst LJ, Botez D, et al., "High-power (> 10 W) continuous-wave operation from 100-mu m-aperture 0.97-mu m-emitting Al-free diode lasers," APPLIED PHYSICS LETTERS Volume: 73 Issue: 9 Pages: 1182-1184 AUG 1998 **(Citations: 50, exclude self-citation)**

5. Tansu N, Kirsch NJ, Mawst LJ, " Low-threshold-current-density 1300-nm dilute-nitride quantum well lasers," APPLIED PHYSICS LETTERS Volume: 81 Issue: 14 Pages: 2523-2525 Published: SEP 30 2002 **(Citations: 49, exclude self-citation)**

6. Tansu N, Mawst LJ, "Low-threshold strain-compensated InGaAs(N) (lambda=1.19-1.31 mu m) quantum-well lasers," IEEE PHOTONICS TECHNOLOGY LETTERS Volume: 14 Issue: 4 Pages: 444-446 APR 2002 **(Citations: 42, exclude self-citation)**

7. ZORY PS, REISINGER AR, MAWST LJ, et al, "ANOMALOUS LENGTH DEPENDENCE OF THRESHOLD FOR THIN QUANTUM-WELL ALGAAS DIODE-LASERS," ELECTRONICS LETTERS Volume: 22 Issue: 9 Pages: 475-477 1986 **(Citations: 39, exclude self-citation)**

8. Tansu N, Yeh JY, Mawst LJ, "Low-threshold 1317-nm InGaAsN quantum-well lasers with GaAsN barriers," APPLIED PHYSICS LETTERS Volume: 83 Issue: 13 Pages: 2512-2514 Published: SEP 29 2003 **(Citations: 36, exclude self-citation)**

9. BOTEZ D, JANSEN M, MAWST LJ, et al, "WATT-RANGE, COHERENT, UNIPHASE POWERS FROM PHASE-LOCKED ARRAYS OF ANTIGUIDED DIODE-LASERS," APPLIED PHYSICS LETTERS Volume: 58 Issue: 19 Pages: 2070-2072, MAY 13 1991 **(Citations: 31, exclude self-citation)**

10. BOTEZ D, MAWST LJ, PETERSON G, et al.Title: RESONANT OPTICAL-TRANSMISSION AND COUPLING IN PHASE-LOCKED DIODE-LASER ARRAYS OF ANTIGUIDES - THE RESONANT OPTICAL WAVE-GUIDE ARRAY ," APPLIED PHYSICS LETTERS Volume: 54 Issue: 22 Pages: 2183-2185 Published: MAY 29 1989 **(Citations: 23, exclude self-citation)**