4th Australian Laser Conference
3rd Conference of the Australian Optical Society

Sydney, 28-30 August 1985

(ISBN 0858379198)

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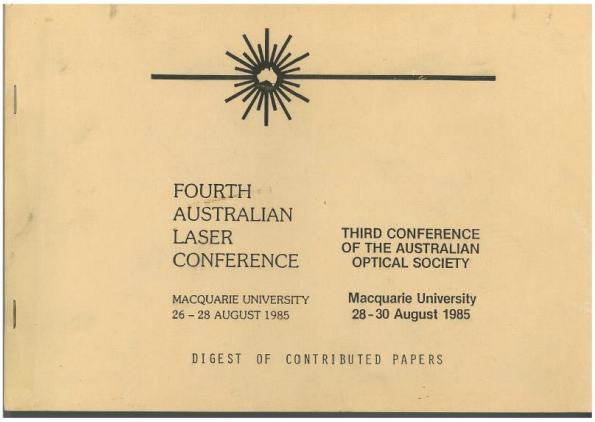

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SH Law, W Wright & IS Falconer	Application of laser-induced fluorescence to plasma diagnostics	D-2
KA Nugent	Imaging thermonuclear neutrons from inertial confinement fusion pellets	D-3
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BJ Orr, AB Duval & DA King	Raman-optical double resonance spectroscopy of glyoxal vapour	E-3
J Reid	Invited Review: Optically pumped NH_3 lasers-new sources of CW radiation in the mid Infrared	
M Bass	Invited Review: Industrial applications of lasers	

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PW Leech	The effect of laser surface melting on the sliding wear behaviour of cast iron	F-2
A Adamski & R McPherson	The effect of laser glazing on plasma sprayed ceramic coatings	F-3
DK Sood & AP Pogany	Internal oxidation during pulsed laser melt quenching of nickel implanted with oxygen	F-4
D Klick, G Paul & D Supurovic	Fourier transform spectroscopy of laser-induced polymerization	F-5
JP Lacey	The impact of laser safety legislation	F-6
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MS Butler & JA Piper	Progress in the development of discharge-excited Sr^+ and Ca^+ recombination lasers	G-1
BA Swartz, DG Matthews & JA Piper	High repetition rate self-heated strontium recombination lasers	G-2
CW Mc Lucas & AI McIntosh	Discharge-heated longitudinal Sr^+ recombination laser	G-3
ND Perry & RC Tobin	Observation of gain on discharge-excited CuI 510.6 nm at room temperature	G-4
DJW Brown, R Kunnemeyer & AI McIntosh	Spectroscopic investigation of pulsed copper and gold vapour lasers	G-5
CE Little & PG Browne	Excitation mechanisms of the 441.6 nm laser transition in the cataphoretic He-Cd laser	G-6
HP Jenssen	Invited Review: New solid state laser materials	
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KCA Crane, PG Browne & DED Baker	A CW CO_2 laser using dc-discharge preionization and gas recirculation	H-1
CJ Walsh & N Brown	A computer-controlled multi-wavelength CO_2 laser for distance measurement	H-2
A Campbell, NR Heckenberg, J Macfarlane & LB Whitbourn	RF pumping of a wide-bore CO_2 laser	H-3
PA Stimson, IS Falconer, BW James, LB Whitbourn & JC Macfarlane	Optimization of the power output of optically-pumped formic acid vapour lasers	H-4
PM Gourlay, BS Frost & NR Heckenberg	Radiation propagation in a circular lightpipe	H-5
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PJ Picone, J Richards & RS Seymour	Nd: Bel revisited	I-1
Z Hasan, ST Keany & NB Hanson	Energy transfer, in some laser materials	I-2
JA Robertson & PL Storey	Saturable inductors and power supplies for pulsed laser systems	I-3
G Reeves & P Kemeny	Fabrication of double heterostructure laser diodes	I-4
G Rosman	Steady state stimulated Brillouin scattering in low loss optical fibres	I-5
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JA Hermann	Coherent effects in superradiant emission from a degenerate medium	J-1
JD Cresser	Time correlations of frequency filtered photons in two photon decay of a three level atom	J-2
P Davis	Phase locking competition mechanism for optical chaos	J-3
JA Hermann	Bistability in a thermally-activated optical switch	J-4
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H Tsuda, MA Akerman, D Klick, D Supurovic & GL Paul	Industrial high average power broadband dye lasers	K-1
W Wright & IS Falconer	A high-power, laser-pumped pulsed dye laser for a laser-induced fluorescence experiment	K-2
GR Mackellar, T Reeves & JA Piper	Metal vapour, excimer and recombination laser-pumped dye lasers	K-3
MG Sceats, DP Millar, N Cotes, G Fell & C Wood	Fluctuations in mode-locked lasers	K-4
	WEDNESDAY 28 AUGUST	
IJ Wilson	Invited Paper: Holographic diffraction gratings	
JE Eberhardt	Invited Paper: Mid-infrared active remote sensing	
J Davis	Invited Paper: The Sydney University stellar interferometer	
Hon BO Jones	Opening Address - Minister of Science and Minister assisting the Minister of Industry, Technology and Commerce	
PW Smith	Invited Review: The future of optical communications	
S Rashleigh	Invited Review: Fibre optic sensors and systems	
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A Scheibner	Dermatologic applications of the argon laser	L-1
DJ Coster	Lasers in ophthalmology: current uses and potential developments	L-2
WN Garwoli, PR Borg, DP Calapai & EP Kenny	Skin characterisation equipment to study skin disease	L-3
WN Garwoli & BG Andrews	Skin disease characterisation medical and theoretical	L-4
PA Wilksch, F Jacka & AJ Blake	A thin-slice technique for measurement of optical scattering and absorbing properties of biological tissue	L-5
PVH Sabine	Optical fibre laser power delivery systems	L-6
TJ Dougherty	Invited Review: Laser cancer phototherapy	
HA Macleod	Invited Review: Recent developments in optical thin films	
	Session M - Poster Presentation	
AE Vaughan	Automation of a star plate measuring machine	M-1
J Davis & WJ Tango	The University of Sydney stellar interferometer project	M-2
C Burton	Lithium niobate Fabry-Perot Filter	M-3
RP Nettertield, PJ Martin WG Sainty & CG Pacey	Studies of the growth of thin films by optical methods and ion-scattering spectroscopy	M-4
L Corena	A scanning lens for a laser beam writing system	M-5
CJ Mitchell	Optimization of optical and spectroscopic instruments using the simplex method with generalized ray-tracing	M-6
BS Frost & PM Gourlay	Radiation propagation in a circular lightpipe: geometrical optics theory	M-7
V Sarafis & ZS Hegedus	High efficiency modified Ryazanov Filters and their application	M-8
TT Nguyen & LN Binh	Single-mode, polarization-preserving fibre in forward scatter LDA	M-9

Y Ito, B Cranston & M Kwietniak	Surface preparation of II-VI semiconducting crystals for opto-electronic devices	M-10
WP Ling	A new design of wavelength trackable photoelastic modulator	M-11
AD McLachlan & FP Meyer	An accurate measurement or the absorption index of` fused silica For CO_2 laser wavelengths	M-12
JE Wllkinson & G Smith	A survey of optics education in Australia	M-13
DR MacFarlane, LJ Moore & JO Warne	IR transmitting heavy metal fluoride glasses: A survey of systems and their properties	M-14
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I Hodgkinson	Invited Review: Effects of microstructure on thin film properties	
	Session N – Thin Films	
PJ Martin, RP Netterfield, WG Sainty & CG Pacey	Review of the optical properties of thin films produced by ion-assisted deposition	N-1
A Piegari & G Emiliani	Wideband antireflection coatings design by the random search approach	N-2
KH Muller	Computer simulation of ion-assisted growth of optical thin films	N-3
SF Jacobs	Invited Review: Dimensional stability of materials useful in optical engineering	
	Session O – Interferometry	
PE Ciddor	A seventy-metre optical bench and interferometer	O-1
IM Bassett	Limit to concentration by focussing	O-2
P Hariharan, BF Oreb & Zhou Wanzhi	Radial shearing interferometry applications of digital techniques of phase measurement and wavefront	O-3
SCB Gascoigne	Invited Review: the Anglo Australian Telescope system	
	Session P – Astronomy	
FG Watson	Progress with FLAIR at the UK Schmidt telescope	P-1
F Forbes	Astronomical seeing monitor	P-2
JW O'Byrne	An interferometric seeing monitor	P-3
TA Facey	invited Review: Design challenges of the optical telescope assembly for the Space Telescope	
DB Rutledge	Invited Review: Millimetre wave optics and devices	
	Session Q - Millimetre Waves	
LB Whitbourn, JC Macfarlane, MM Blanco, RC Compton, RC McPhednan, JA How & D Veron	Recent progress in equivalent circuit transmission line modelling of periodic metal grid reflectors	Q-1
RC Compton & DB Rutledge	Design of a two dimensional quasi-optical antenna array	Q-2
	FRIDAY 30 AUGUST	
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	Session R - Remote Sensing	
TD Cocks & AA Green	Electro-optical instrumentation for remote sensing in the Australian environment	R-1
JC Scott	A satellite borne instrument for the measurement of cloud spatial variability	R-2
G Findlay & DR Cutten	The sensitivity of atmospheric ir transmission to errors in water-vapour profiles	R-3
TD Cocks, MT O'Brien & GT Roberts	The development of an airborne multispectral scanner using optical fibres	R-4

NK Jones	A wide field, high resolution optical-mechanical image scanning technique	R-5
MS Brown	An acousto-optic interferometer for radio frequency direction of arrival measurements	R-6
W da-Heng	Invited Review: Recent developments in optics in China	
A Marechal	Invited Review: Some aspects of optics in Europe and France	
	Session S - Image Processing Interferometry	
JL Gardner	An off-axis Fizeau wavemeter	S-1
IJ Wilson	Optical processing of lattice images using phase object transparencies	S-2
WN Garwoli & DJ Jones	Industrial applications of holography and related matters	S-3
	Session T - Miscellaneous Topics	
N Brown	Phase-shift laser interferometer for the measurement of small displacements	T-1
GW Forbes	A truncated aberration series is only as good as its argument	T-2
A Roberts & RC McPhedran	Energy absorption in highly conducting gratings	T-3