

GRANTS

Australian National Fabrication Facility Ltd

Grant

Jagadish Chennupati Prof
NCRIS 2013 Funding Agreement - Australian National Fabrication Facility Limited (ANFFL)
1/07/2013 - 30/06/2015
\$1,445,199.00

Australian National Low Emissions Coal Research & Development

Research Grant

Senden Timothy Prof - Sheppard Adrian Dr - Knackstedt Mark Prof - Pinczewski Wolf Val - Green Chris - Cunningham Saul - Golding Suzanne - Butcher Alan R
Improving CO2 storage site assessment: Maximising the value of Digital Core Analysis for carbon sequestration site assessment
1/04/2012 - 1/04/2015
\$1,634,406.00

Australian National University (ANU) Contribution from Central Funds

Lam Ping Koy Prof - James Matthew Prof - Buchler Benjamin Dr - Symul Thomas Dr - Sellars Matthew Dr - Simmons Michelle Yvonne
ARC Centre of Excellence for Quantum Computation and Communication Technology (QC2T)
1/01/2011 - 31/12/2015
\$626,500.00

Luther-Davies Barry Prof - Neshev Dragomir Prof - Kivshar Yuri Prof - Madden Steve Dr
Quantum nonlocality tests with ultracold atoms
1/01/2012 - 1/01/2014
\$700,000.00

Australian Research Council (ARC) 2009 Australian Laureate Fellowship

Jagadish Chennupati Prof
Nanowire Quantum Structures for Next Generation Optoelectronics
25/11/2009 - 24/11/2014
\$2,753,840.00

2011 Australian Laureate Fellowship

Dasgupta Mahananda Dr
Frontiers of Reaction Dynamics for New Generation Accelerator Science
1/06/2012 - 31/05/2017
\$2,750,752.00

2012 Discovery Early Career Research Award

Xia Hua Dr
Understanding winds: energy transfer in turbulent rotating fluids
1/02/2012 - 31/01/2015
\$375,000.00

Yang Zhiyong Dr
Integrated Mid-Infrared optical microcavity sensors
1/01/2012 - 31/12/2014
\$375,000.00

2013 Discovery Early Career Research Award

Chang Wonkeun Dr
Dissipative soliton lasers: Innovative approach to high-energy femtosecond pulse generation
31/03/2013 - 30/03/2016
\$372,520.00

Chow Jong Dr
Geo-thermometers based on laser absorption spectroscopy
30/06/2013 - 30/06/2016
\$366,069.00

Garanovich Ivan Dr
Nanowaveguides with a twist: shaping and switching of light pulses in modulated nanowaveguide arrays (RELINQUISHED)
30/06/2013 - 29/06/2016
\$359,446.00
Hnatovsky Kyrylo (Cyril) Dr
Advanced laser micromachining with femtosecond vector beams
1/01/2013 - 31/12/2015
\$375,000.00

Miroshnichenko Andrey Dr - Desyatnikov Anton S Dr - Izdebskaya Yana Dr - Smalyukh Ivan
Advanced photonics with flexible pixels in liquid crystals
1/01/2013 - 31/12/2015
\$435,000.00

Ostrovskaya Elena Dr - Desyatnikov Anton S Dr - Dall Robert Dr - Fraser Michael - Skryabin Dmitry
Towards polaritonics: Non-equilibrium dynamics of condensed microcavity polaritons
1/01/2013 - 31/12/2015
\$530,000.00

Ren Fang-Fang Dr
Development of terahertz metamaterials based on III-V compound semiconductors
18/07/2013 - 25/05/2016
\$375,000.00

Sukhorukov Andrey Dr - Choi Duk-Yong Dr
Flexible nonlinear photonics with nanowire slow-light waveguides
1/01/2013 - 31/12/2015
\$430,000.00

Sukhorukov Andrey Dr - Szameit Alexander - Pertsch Thomas
Nonlinear nano-photonics structures for frequency conversion: from classical to quantum applications
1/01/2013 - 31/12/2015
\$335,000.00

2010 Discovery: Project Grant

Gao Qiang Dr - Tan Hoe Hark Prof - Johnston Michael B
Integration of III-V semiconductor nanowires on silicon platform
1/03/2010 - 28/02/2015
\$740,000.00

Neshev Dragomir Prof
Nanoscale nonlinear optics
1/01/2010 - 31/12/2014
\$555,000.00

Ridout David Dr

Indecomposable Structure in Representation Theory and Logarithmic Conformal Field Theory
20/09/2010 - 19/06/2015
\$570,000.00

Robins Nicholas Dr - Close John Prof - Oberthaler Markus K - Kasevich Mark A - Aspect Alain
Advanced Atomic Sources for Precision Measurement
1/01/2010 - 31/12/2014
\$529,797.00

Shadrivov Ilya Dr
Nonlinear metamaterials and transformation optics
8/02/2010 - 31/12/2014
\$700,000.00

Ye Jiandong Dr
Development of high performance wide-bandgap polar oxide electronic and optoelectronic devices
15/06/2010 - 31/12/2014
\$780,000.00

2011 Discovery: Project Grant

Akhmediev Nail Prof - Ankiewicz Adrian Dr - Taki Majid
Rogue waves in oceans and optical fibers
1/01/2011 - 31/12/2013
\$390,000.00

Baldwin Kenneth Prof - Orr Brian J - Warrington Richard B - Eyler Edward
Using high-resolution lasers to test quantum electrodynamics
1/01/2011 - 31/12/2013
\$240,000.00

Craig Vincent Prof - Senden Timothy Prof - Notley Shannon Dr
Using light to move molecules a novel approach to exploring intermolecular forces
1/01/2011 - 31/12/2013
\$365,000.00

Dasgupta Mahananda Dr - Hagino Kouichi - Tostevin Jeffrey Allan
From coherent to dissipative dynamics in complex quantum systems: Emerging new ideas from precision measurements of nuclear collisions
4/04/2011 - 3/04/2014
\$450,000.00

Hinde David Prof - Schmidt Karl-Heinz - Liang Junjien Felix
Researching the super heavy elements: a quantitative understanding through integrating new reaction time measurements with theoretical models
1/01/2011 - 31/12/2013
\$490,000.00

Hole Matthew Dr
Emergence and control of self organisation in fusion plasmas: through the International Thermonuclear Experimental Reactor (ITER) and beyond
1/01/2011 - 31/12/2013
\$255,000.00

Izdebskaya Yana Dr
All-optical reconfigurable interconnects in nematic liquid crystals
1/04/2011 - 31/03/2014
\$355,000.00

Parsons Drew Dr - Ninham Barry Prof

Hofmeister at Work. Implementation of a paradigm shift in Physical Chemistry
1/01/2011 - 31/12/2013
\$540,000.00

Powell David Dr - Shadrivov Ilya Dr - Engheta Nader
Functional metamaterials based on chiral structures
1/01/2011 - 31/12/2013
\$475,000.00

Robins Vanessa Dr - Sheppard Adrian Dr
Foundations and advanced algorithms for topological image processing
1/01/2011 - 31/12/2013
\$255,000.00

Rode Andrei V Prof - Krolikowski Wieslaw Prof - Padgett Miles
Nanometrology of laser-trapped airborne particles
1/01/2011 - 31/12/2013
\$510,000.00

Shats Michael Dr - Punzmann Horst Dr - Falkovich Gregory
Extreme wave events on the water surface
1/01/2011 - 31/12/2013
\$330,000.00

Tan Hark Hoe Prof
III-V semiconductor nanowire solar cells
1/01/2011 - 31/12/2013
\$556,000.00

Wang Rongping Dr - Russo Salvy P - Jain Himanshu - Ngai Kia
Understanding and optimizing the microstructure of Ge-As-Se glasses for superior device performance
1/01/2011 - 31/12/2013
\$210,000.00

2011 Discovery: Project Grant - externally led

Bouwknegt Pier (Peter) Prof - Varghese Mathai
Supersymmetric Quantum Field Theory Topology and Duality
1/01/2011 - 31/12/2013
\$185,000.00

2012 Discovery Project Grant

Elliman Robert Prof - Fletcher Neville Prof - Jones Kevin
The effect of stress on the production and evolution of defects in ion-implanted silicon
1/01/2012 - 31/12/2014
\$300,000.00

Elliman Robert Prof - Choi Suk Ho
Understanding and improving resistive-switching in hafnium-oxide-based high-k dielectrics for non-volatile memory applications
1/01/2012 - 31/12/2014
\$300,000.00

Howard John Prof - Chung Jinil - Wolf Robert
Towards a steady-state fusion reactor: understanding and controlling eruptive instabilities in tokamaks
1/01/2012 - 31/12/2014
\$430,000.00

Jagadish Chennupati Prof

Ternary and quaternary III-V semiconductor nanowires and related quantum structures for optoelectronics applications

1/01/2012 - 31/12/2014
\$330,000.00

Kheifets Anatoli Prof - Ullrich Joachim
Atto-second Atomic Dynamics

1/01/2012 - 1/01/2014
\$360,000.00

Kluth Patrick A/Prof. - Weber William - Lang M - Trautmann Christina

Nanoscale investigation of fission track formation and stability in geological environments
1/01/2012 - 31/12/2014
\$380,000.00

Krolikowski Wieslaw Prof - Bang Ole - Arie Ady
Managing light in nonlinear photonic structures

1/01/2012 - 31/12/2014
\$370,000.00

Luther-Davies Barry Prof - Wang Rongping Dr
Pulsed laser deposition of rare-earth-doped crystalline oxide films: a step towards quantum information processing on a chip

1/01/2012 - 31/12/2014
\$380,000.00

Manson Neil Prof

Optically induced spin polarisation: the role of electron-vibration interactions

1/01/2012 - 31/12/2015
\$280,000.00

Ridgway Mark C Prof - Byrne Aidan Prof - Wesch Werner - Nordlund Kai

Porosity in Si_{1-x}Ge_x and the Si(x)Ge(1-x) alloys induced by ion irradiation
1/01/2012 - 31/12/2014
\$320,000.00

Rode Andrei V Prof - Yang Wenge - Juodkazis Saulius
Ultra-fast alchemy: A new strategy to synthesise super-dense nanomaterials

1/01/2012 - 31/12/2014
\$560,000.00

Stricker Christian Prof - Redman Stephen Prof - Bachor Hans Prof - Stuart Gregory J Prof - Daria Vincent Dr

Using light to probe brain activity in three dimensions
1/01/2012 - 31/12/2014
\$430,000.00

Truscott Andrew Dr - Baldwin Kenneth Prof - Aspect Alain - Westbrook Christoph I - Kheruntsyan Karen V

Quantum nonlocality tests with ultracold atoms
1/01/2012 - 1/01/2014
\$360,000.00

Wong-Leung Yin-Yin (Jennifer) A/Prof. - Williams James Prof - McCallum Jeffrey C - Grimaldi Maria - Priolo Francesco

Understanding the structure and unusual properties of ion implanted amorphous germanium

1/01/2012 - 31/12/2014
\$620,000.00

2013 Discovery Project Grant

Batchelor Murray Prof - Mangazeev Vladimir Dr - Baxter Rodney Prof

The connection between discrete holomorphicity and Yang-Baxter integrability
1/01/2013 - 31/12/2015
\$300,000.00

Fifield L Keith Prof - Tims Stephen Dr

Developing new techniques for mapping soil loss and movement in Australia
1/01/2013 - 31/12/2015
\$360,000.00

Fu Lan A/Prof. - Johnston Michael B - Parkinson Patrick Wallace

III-V semiconductor nanowires for ultrafast device applications
1/01/2013 - 31/12/2015
\$400,000.00

Hinde David Prof - Williams Elizabeth Dr - Hagino Kouichi - Tostevin Jeffrey Allan - Freer Martin

Mapping the microscopic pathway to dissipation in quantum nuclear collisions
1/01/2013 - 31/12/2015
\$405,000.00

Lane Gregory Dr - Dracoulis George Prof

Pure and applied nuclear structure research with radioactive ion beams at CARIBU
30/06/2013 - 30/06/2016
\$385,000.00

2013 Discovery Project-externally led

Hope Joseph Dr - Carvalho Andre Dr - Kielpinski D

Building Schrodinger's cat: large-scale entanglement of trapped ions
1/01/2013 - 31/12/2015
\$66,000.00

2009 Future Fellowships

Hole Matthew Dr

Fusion Energy and the Physics of Burning Plasmas
15/02/2010 - 6/01/2014
\$686,400.00

2010 Future Fellowships

Buchler Benjamin Dr

Memory and light for integrated quantum systems
7/03/2011 - 6/03/2014
\$577,884.00

Corr Cormac Dr

The plasma boundary: A major challenge for fusion science and material technology for ITER and beyond
1/01/2011 - 31/12/2014
\$680,552.00

Lane Gregory Dr

New directions for nuclear structure research in Australia
26/05/2011 - 25/05/2015
\$706,552.00

Shaddock Daniel Dr

Laser Interferometry for Space Science
20/01/2011 - 19/01/2015
\$706,552.00

Sheppard Adrian Dr
Testing theories of two-phase flow in porous media through experiment imaging and modelling
7/01/2011 - 31/12/2014
\$773,072.00

Sukhorukov Andrey Dr
Functional nonlinear nanophotonics
31/05/2011 - 30/05/2015
\$580,429.00
Truscott Andrew Dr
Observing Einstein-Podolsky-Rosen entanglement with ultracold atomic gases
6/01/2011 - 5/01/2015
\$692,552.00

2011 Future Fellowships

Choi Duk-Yong Dr
A silicon-compatible light source on a silicon-on-insulator platform
16/12/2011 - 15/12/2015
\$714,528.00

Fu Lan A/Prof.
High performance compound semiconductor nanowire optoelectronic devices
1/01/2012 - 31/12/2015
\$711,228.00

Miroshnichenko Andrey Dr
Resonant Nanophotonics: tailoring resonant interaction of light with nanoclusters
1/01/2012 - 31/12/2015
\$578,704.00

Ostrovskaya Elena Dr
Nonlinear polaritonics: Harnessing collective behaviour of half-light half-matter
8/02/2012 - 7/02/2016
\$594,928.00

Sellars Matthew Dr
Solid-state quantum communication technology
1/01/2012 - 31/12/2015
\$702,684.00

Tan Hark Hoe Prof
Selective Area Nano-Epitaxy
30/01/2012 - 29/01/2016
\$822,856.00

2012 Future Fellowships

Caroff Philippe Dr
Antimonide-based nanowires for infra-red and energy applications
1/02/2013 - 31/01/2017
\$714,528.00

Hope Joseph Dr
Controlling ultracold gases
16/08/2012 - 15/08/2016
\$813,902.00

Kluth Patrick A/Prof.
Investigation of the structure and stability of ion tracks in application specific materials and environments
1/06/2013 - 31/05/2017
\$710,628.00

Simenel Cedric Dr
Microscopic many-body new approaches for fundamental science and applications

17/01/2013 - 16/01/2017
\$712,828.00

2011 Linkage: Projects-externally led

Baldwin Kenneth Prof - McClelland David Prof - Luiten Andre Nicholas
Creating a National Time and Frequency Network for Australia
24/06/2011 - 24/06/2014
\$30,000.00

2012 Linkage: Projects (Round 1)

Elliman Robert Prof
Controlling the forming and switching characteristics of non-volatile resistive memory devices using ion implantation
1/01/2012 - 31/12/2014
\$335,000.00

2012 Linkage: Projects (Round 2)

Williams James Prof - Haberl Bianca Dr - Bradby Jodie A/Prof - Huis in 't Veld Bert
Exploiting deep sub-surface temperature-induced phase-transformations for an improved approach to semiconductor laser-dicing
1/06/2013 - 1/06/2015
\$180,000.00

2013 Linkage: Infrastructure Equipment Facilities

McClelland David Prof - Slagmolen Bram Dr - Shaddock Daniel Dr - Ottaway D J - Whitcomb Stanley Ernest - Shoemaker D - Reitze D - Munch Jesper - Veitch Peter John - Lazzarini A
Australian partnership in Advanced LIGO - continuation
1/01/2013 - 31/12/2013
\$990,000.00

Centre of Excellence

Lam Ping Koy Prof - James Matthew Prof - Buchler Benjamin Dr - Symul Thomas Dr - Sellars Matthew Dr - Simmons Michelle Yvonne
ARC Centre of Excellence for Quantum Computation and Communication Technology (QC2T)
1/01/2011 - 31/12/2015
\$6,265,000.00

Luther-Davies Barry Prof - Neshev Dragomir Prof - Kivshar Yuri Prof - Madden Steve Dr
Quantum nonlocality tests with ultracold atoms
1/01/2012 - 1/01/2014
\$7,700,000.00

Sullivan James Dr - Lower Julian Dr - Buckman Stephen Prof - McEachran Robert Prof - Burrow Paul - Bray Igor - Stelbovics Andris - Fursa Dmitry - Bastow Timothy - Samarin Sergey - Smith Suzanne - Vance Lou - Surko Clifford M - Marler Joan P - McCurdy Clyde - Orel Ann - Nagai Yasuyoshi - Bartschat Klaus R - Koller Hubert - Pas Steven - Teubner Peter J - Brunger Michael J - Williams J.F - Hill Anita - Lohmann Birgit - Mason Nigel John - Rescigno Thomas Nicola
ARC Centre of Excellence: Centre for Antimatter-Matter Studies
1/07/2010 - 31/12/2013
\$4,550,000.00

Super Science Fellowship

Jagadish Chennupati Prof - Kivshar Yuri Prof
Nanofabrication of Metamaterials for Next Generation
Optical Devices
1/07/2011 - 30/06/2014
\$835,200.00

**Australian Synchrotron Company Ltd
Grants Program**

Kremer Felipe Dr
Structural properties of Co and Ni nanoparticles
embedded in silicon oxynitride
29/10/2013 - 1/11/2013
\$1,115.00

Access to Synchrotron Facilities

Williams James Prof - Bradby Jodie A/Prof
The temperature-dependent phase transition behavior
and possible polymorphism of fully coordinated
amorphous silicon
25/03/2013 - 25/03/2014
\$6,400.00

**Bluescope Steel Australia Ltd
Development Contract**

Howard John Prof
Joint Development and Testing Agreement
20/12/2013 - 11/04/2014
\$39,765.00

**Commonwealth Department of Defence
Science and Technology Organisation
(DSTO)**

Postdoctoral Fellowship
Close John Prof - Debs John Mr
DSTO Post Doctoral Fellowship
1/06/2012 - 31/05/2014
\$239,625.00

**Commonwealth Department of
Education**

Education Investment Fund
Elliman Robert Prof - Hinde David Prof - Fifield L Keith
Prof
Heavy Ion Accelerator Education Investment Fund
Project
24/12/2009 - 31/03/2014
\$10,000,000.00

Collaborative Research Infrastructure Scheme

Hinde David Prof
Heavy Ion Accelerators
1/07/2013 - 31/12/2014
\$2,280,000.00

**National Collaborative Research Infrastructure
Strategy**

Hinde David Prof
NCRIS 2013 Heavy Ion Accelerators Project
1/07/2013 - 30/06/2016
\$760,000.00

Education Investment Fund

Jagadish Chennupati Prof
Australian National Fabrication Facility EIF -ACT Node
Project
8/06/2011 - 30/06/2013
\$5,230,000.00

Punzmann Horst Dr - Howard John Prof - Blackwell Boyd
Prof
Plasma Fusion Education Investment Fund Project
24/12/2009 - 31/03/2014
\$7,000,000.00

Senden Timothy Prof
NeCTAR: The Characterisation Virtual Laboratory
1/06/2012 - 31/12/2014
\$184,162.00

Collaborative Research Infrastructure Scheme

Blackwell Boyd Prof
The Australian Plasma Fusion Research Facility
1/07/2013 - 31/12/2015
\$900,000.00

**Dept of Industry Innovation Climate
Change Science Research and Tertiary
Education (DIICSRTE)**

National Enabling Technologies Strategy
Jagadish Chennupati Prof
ANU Australian Research Council Nanotechnology
Network (ARCNN)
1/04/2011 - 31/07/2013
\$600,000.00

**Japan Oil Gas and Metals National
Corporation**

Research Agreement
Senden Timothy Prof - Knackstedt Mark Prof - Arns
Christoph Dr - Sheppard Adrian Dr - Pinczewski Wolf Val
Digital Core Research Consortium
13/07/2006 - 30/06/2009
\$2,611,188.00

**Lithicon Australia Pty Ltd
Research Contract**

Saadatfar Mohammad Dr
Study on 3D characterisation of permeability reduction
with overburden stress
1/06/2013 - 20/12/2013
\$10,000.00

**Lithicon Norway
Research Contract**

Fogden Andrew Dr
Wettability Analysis
1/06/2013 - 30/12/2015
\$40,000.00

Lockheed Martin Integrated Systems & Services**Research Services**

Charles Christine Prof
 R&D plan to increase Pocket Rocket Thruster's
 Technology Readiness Level (TRL)
 11/11/2013 - 12/05/2014
 \$109,084.00

Maersk Oil**Industry contribution**

Senden Timothy Prof - Fogden Andrew Dr - Sheppard
 Adrian Dr
 Project B: Calibrated computational multiphase flow
 methods incorporating the surface/wettability state of
 Maersk core material
 1/10/2012 - 1/11/2014
 \$162,000.00

Senden Timothy Prof - Sheppard Adrian Dr
 Project A: Submicron CT scanning
 1/11/2012 - 1/11/2014
 \$1,235,000.00

REPSOL Spain**Technology Cooperation Agreement**

Senden Timothy Prof
 Multiscale Reservoir Characterization & Rock Typing
 22/05/2013 - 31/12/2015
 \$381,033.00

Schlumberger Foundation**Faculty for the Future Program**

Salama Hazar Dr
 Structural and vibrational properties of metal
 nanoparticles in silicon nitride
 1/02/2013 - 1/02/2014
 \$44,752.00

Science and Industry Endowment Fund**John Stocker Postgraduate Scholarships**

Corr Cormac Dr - De Temmerman G - Riley Daniel
 Ion interactions with fusion relevant materials
 1/01/2013 - 31/12/2015
 \$51,000.00

Statoil ASA**Contract**

Fogden Andrew Dr
 Wettability and residual oil in sandstones
 1/10/2012 - 31/03/2016
 \$85,000.00

University of Arizona**Grant**

Rode Andrei V Prof
 (BRI) Unified First Principle Analysis of Ultraintense
 Laser Matter interactions: Theory Computation and
 Experiments CFDA: 12.800
 30/09/2012 - 20/11/2015
 \$330,049.00

Volkswagen Stiftung**Grant**

Akhmediev Nail Prof - Hoffman Norbert - Pelinovsky E -
 Peinke Joachim
 Extreme Ocean Gravity waves: Analysis and prediction
 on the basis of breather solutions of nonlinear evolution
 equations
 1/02/2011 - 3/02/2014
 \$687,383.00