PHOTON 2018

Poster Programme

Poster Session 1

P01 Beyond Terahertz surface nonlinear emission limits
Luke Peters, University of Sussex, UK

P02 The role of leaky-waves in high-performance extraordinary THz transmission quasi-optical filters
Miguel Navarro-Cia, University of Birmingham, UK

P03 Hyperspectral Terahertz microscopy with nonlinear ghost imaging
Juan Sebastian Toter Gongora, University of Sussex, UK

P04 Methods of generating Terahertz: A review
Nasir Garba Bello, Aston University, UK

P05 Intense broadband multi-terahertz pulses of 280 MV/cm for gaseous medium nonlinearity
Ya Bai, Chinese Academy of Sciences, China

P09 Photonic Hilbert transformer based on phase-modulated fiber Bragg grating in transmission
Xin Liu, Aston University, UK

P10 Numerical simulations of speckle to extract surface roughness parameters from random rough surface scattering
Amrit Lotay, Durham University, UK

P11 Investigation of low-index waveguiding in inverse rod-connected diamond photonic crystals
Mike Taverne, University of Bristol, UK

P12 Indirect- to direct-gap transitions in Ge(C,Sn) group-IV semiconductor alloys: mechanisms and implications
Christopher Broderick, University College Cork, Ireland

P13 Scattering of waves by pre-fractal Cantor-set apertures: nonparaxial formulation and numerical analysis
Holly Middleton-Spencer, University of Salford, UK

P14 On generalizing the knife-edge problem for fractal waves: the Weierstrass-Lamb solution
James Christian, University of Salford, UK

P16 Singlet oxygen luminescence dosimetry with a fiber-coupled superconducting nanowire single-photon detector
Konstantinos Tsimrakidis, University of Glasgow, UK

P17 Measurement of blood oxygenation in nailfold capillaries: a feasibility study in patients with systemic sclerosis and healthy controls
Michael Berks, The University of Manchester, UK

P18 The OPTA device: A novel miniature optical probe to evaluate tissue atrophy
Amrit Lotay, Durham University, UK

P19 A multimodality hybrid gamma-near infrared (NIR) fluorescence camera for intraoperative cancer surgery
Awad Almarhaby, University of Leicester, UK

P20 A concept of pixellated optics for low vision aids: Telescope Windows
Cyril Bourgenot, Durham University, UK

P21 Imaging ellipsometry as a novel detection method for protein-protein interactions
John Tomes, Aberystwyth University, UK

P27 Structure and optical properties of Er3+-doped gallium lanthanum sulfide (GLS) thin films prepared by femtosecond pulsed laser deposition
Kheir Albarakaty, University of Leeds, UK

P37 Modulational instability and soliton dynamics in Lithium Niobate nano-waveguides
Andrey Gorbach, University of Bath, UK

P38 Rotating patterns of fully structured light in Kerr resonators
Gian-Luca Oppo, University of Strathclyde, UK

P39 Using of the Beam Divergence Diagnostic for Defining a Kerr Lens Effective Focal Length
Sabrina Leghmizi, University of Sciences and Technology Houari Boumedienne (USTHB), Algérie

P40 All optical push-broom dynamics
Baldeep Kaur, University of Greenwich, UK

P41 Nonlinear fourier transform analysis of a mode-locked fibre laser
Morteza Kamalian Kopae, Aston University, UK

P42 Nonlinear regimes governed by parametric interaction in micro-cavities
Luigi Di Lauro, University of Sussex, UK

P43 Ultra-short pulsed all-fiber amplifier similariton erbium doped fiber lasers
Joanna Modupeh Hodasi, University of Ghana, Ghana

P44 Giant multiphoton absorption for THz resonances in silicon hydrogenic donors
Nguyen Le, University of Surrey, UK

P49 Developments in low cost laser detection
David Benton, Aston University, UK
PHOTON 2018

**Poster Session 2**

**P06** A low cost open source pressure myograph system  
Penelope Lawton, Durham University, UK

**P07** Single arm vibrational optical coherence elastography (OCE) for tissue mechanical properties characterization  
Duo Zhang, University of Dundee, UK

**P08** Auto-phase-locked time-gated luminescence microscope for background-free upconversion biological imaging  
Zeze Zhu, Huazhong University of Science and Technology, China

**P15** Simple model of self-phase modulation spectral patterns in optical fibres  
Sonia Boscolo, Aston University, UK

**P22** Ultra low-loss super-resolution with extremely anisotropic semiconductor metamaterials  
William Hart, Imperial College London, UK

**P23** Unexpected constitutive properties in electromagnetism and metamaterials  
Paul Kinsler, Lancaster University, UK

**P24** Shaping longitudinal electric field profiles using wire metamaterials  
Taylor Boyd, Lancaster University, UK

**P25** Resonant state expansion generalised to magnetic, chiral, and bi-anisotropic open optical systems and metamaterials  
Egor Muljarov, Cardiff University, UK

**P26** The multiphysics solution to Maxwell-Hydrodynamic Equations for modeling Terahertz generation from plasmonic metasurfaces  
Wei EI Sha, University College London, UK

**P28** Three dimensional (3D) photonic crystal composites with high refractive index thin films  
Xu Zheng, University of Bristol, UK

**P29** Direct laser ablation based diffractive polymer surface  
Rajib Ahmed, University of Birmingham, UK

**P30** Bio-inspired microstructures for surface functionality applications  
Rajib Ahmed, University of Birmingham, UK

**P31** The coherent random lasing based on PM597 laser dye doped-azobenzene polymer vesicles  
Zhijia Hu, Hefei University of Technology, China

**P32** Quantitative correlative light-electron microscopy of single plasmonic nanoparticles  
Yisu Wang, Cardiff University, UK
<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>P33</td>
<td>Towards high energy Q-switching erbium doped fibre laser</td>
<td>Hani K bashi, Aston University, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P34</td>
<td>Optical properties of refractory metal based thin films for nanophotonic applications</td>
<td>Archan Banerjee, University of Glasgow, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P35</td>
<td>Towards a full 3D photonic bandgap structure in the near infrared region via back-filling of polymer templates</td>
<td>Lifeng Chen, University of Bristol, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P36</td>
<td>Spatial architecture impact in mediation open circuit voltage control of quantum solar cell recovery systems</td>
<td>Moustafa Osman, EEA, Egypt</td>
<td>Egypt</td>
</tr>
<tr>
<td>P37</td>
<td>Calibration phantoms for optical coherence tomography</td>
<td>Yang Lu, Aston University, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P38</td>
<td>Optimal quantum metrology for quantum optical systems</td>
<td>Jasminder Sidhu, University of Sheffield, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P39</td>
<td>Passive broadband polarimeter based on a Fresnel cone</td>
<td>Ryan Hawley, University of Glasgow, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P40</td>
<td>Micro-Scale Optical Profilometry with Fiber Optic Lloyd’s Mirror</td>
<td>Gulsen Kosoglu, Marmara University, Turkey</td>
<td>Turkey</td>
</tr>
<tr>
<td>P41</td>
<td>Optomechanical self-structuring of a Bose-Einstein Condensate</td>
<td>Gordon Robb, University of Strathclyde, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P42</td>
<td>Optomechanical self-structuring instabilities involving orbital angular momentum</td>
<td>Giuseppe Baio, University of Strathclyde, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P43</td>
<td>Development &amp; field testing of an automated portable optomechanical accelerometer</td>
<td>Ying Lia Li, University College London, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P44</td>
<td>Lindblad dynamics of quantum walkers in optical lattices</td>
<td>Bradley Longstaff, Imperial College London, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P45</td>
<td>Nano-cathodoluminescence and Carrier Dynamics in All-inorganic Perovskite Nanocrystals</td>
<td>Ruben Ahumada-Lazo, The University of Manchester, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P46</td>
<td>Experimental investigation of plasmon-exciton coupling in MBE InAs quantum dots and silver nanoparticles</td>
<td>Igor Gladskikh, ITMO University, Russia</td>
<td>Russia</td>
</tr>
<tr>
<td>P47</td>
<td>Ultrasensitive Time and Spectrally-Resolved Microscopy of Single Multiple Quantum Well Nanowire Lasers</td>
<td>Stefan Skalsky, The University of Manchester, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P48</td>
<td>Efficient excitation of a single molecule for photon generation</td>
<td>Ross C Schofield, Imperial College London, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P49</td>
<td>Luminescent carbon nanodots directly grown on Si-based substrates by chemical vapor deposition</td>
<td>Rui Huang, Hanshan Normal University, China</td>
<td>China</td>
</tr>
<tr>
<td>P50</td>
<td>Speed limits for quantum photonics</td>
<td>Peter Barrow, Heriot Watt University, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P51</td>
<td>A new explanation for the color variety of photons</td>
<td>Mohammadjavad Faraji, Saleh Research Centre, Iran</td>
<td>Iran</td>
</tr>
<tr>
<td>P52</td>
<td>Many-body physics with quantum simulators</td>
<td>Stuart Flannigan, University of Strathclyde, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P53</td>
<td>Nonlocal coherent perfect absorption</td>
<td>John Jeffers, University of Strathclyde, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P54</td>
<td>Optimisation and quality control of optical trapping in bespoke hydrogels</td>
<td>Jenna James, University of Nottingham, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P55</td>
<td>Levitated electromechanics</td>
<td>James Millen, King’s College London, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P56</td>
<td>High resolution SAW elastography for ex-vivo porcine skin specimen</td>
<td>Kairui Feng, University of Dundee, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P57</td>
<td>Optical fibre sensing of pH, temperature, turbidity and chemical species for nuclear industry applications</td>
<td>Jessica Hyde, University of Manchester, UK</td>
<td>UK</td>
</tr>
<tr>
<td>P58</td>
<td>A fibre-tip Fabry-Pérot cavity for deterministic, strong atom-photon interactions</td>
<td>Marwan Mohammed, University of Oxford, UK</td>
<td>UK</td>
</tr>
</tbody>
</table>

www.photon.org.uk
### Poster Programme

#### Full programme

**Advances in THz Technology**

<table>
<thead>
<tr>
<th>Poster</th>
<th>Title</th>
<th>Speaker</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>P01</td>
<td>Beyond Terahertz surface nonlinear emission limits</td>
<td>Luke Peters, University of Sussex, UK</td>
<td></td>
</tr>
<tr>
<td>P02</td>
<td>The role of leaky-waves in high-performance extraordinary THz transmission quasi-optical filters</td>
<td>Miguel Navarro-Cia, University of Birmingham, UK</td>
<td></td>
</tr>
<tr>
<td>P03</td>
<td>Hyperspectral Terahertz microscopy with nonlinear ghost imaging</td>
<td>Juan Sebastian Toter Gongora, University of Sussex, UK</td>
<td></td>
</tr>
<tr>
<td>P04</td>
<td>Methods of generating Terahertz: A review</td>
<td>Nasir Garba Bello, Aston University, UK</td>
<td></td>
</tr>
<tr>
<td>P05</td>
<td>Intense broadband multi-terahertz pulses of 280 MV/cm for gaseous medium nonlinearity</td>
<td>Ya Bai, Chinese Academy of Sciences, China</td>
<td></td>
</tr>
</tbody>
</table>

**Biophotonics**

<table>
<thead>
<tr>
<th>Poster</th>
<th>Title</th>
<th>Speaker</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>P06</td>
<td>A low cost open source pressure myograph system</td>
<td>Penelope Lawton, Durham University, UK</td>
<td></td>
</tr>
<tr>
<td>P07</td>
<td>Single arm vibrational optical coherence elastography (OCE) for tissue mechanical properties characterization</td>
<td>Duo Zhang, University of Dundee, UK</td>
<td></td>
</tr>
<tr>
<td>P08</td>
<td>Auto-phase-locked time-gated luminescence microscope for background-free upconversion biological imaging</td>
<td>Zece Zhu, Huazhong University of Science and Technology, China</td>
<td></td>
</tr>
</tbody>
</table>

**Computational Photonics**

<table>
<thead>
<tr>
<th>Poster</th>
<th>Title</th>
<th>Speaker</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>P09</td>
<td>Photonic Hilbert transformer based on phase-modulated fiber Bragg grating in transmission</td>
<td>Xin Liu, Aston University, UK</td>
<td></td>
</tr>
<tr>
<td>P10</td>
<td>Numerical simulations of speckle to extract surface roughness parameters from random rough surface scattering</td>
<td>Amrit Lotay, Durham University, UK</td>
<td></td>
</tr>
<tr>
<td>P11</td>
<td>Investigation of low-index waveguiding in inverse rod-connected diamond photonic crystals</td>
<td>Mike Taverne, University of Bristol, UK</td>
<td></td>
</tr>
<tr>
<td>P12</td>
<td>Indirect- to direct-gap transitions in Ge(C,Sn) group-IV semiconductor alloys: mechanisms and implications</td>
<td>Christopher Broderick, University College Cork, Ireland</td>
<td></td>
</tr>
<tr>
<td>P13</td>
<td>Scattering of waves by pre-fractal Cantor-set apertures: nonparaxial formulation and numerical analysis</td>
<td>Holly Middleton-Spencer, University of Salford, UK</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Poster</th>
<th>Title</th>
<th>Speaker</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>P14</td>
<td>On generalizing the knife-edge problem for fractal waves: the Weierstrass-Lamb solution</td>
<td>James Christian, University of Salford, UK</td>
<td></td>
</tr>
</tbody>
</table>

**Fibres and propagation physics**

<table>
<thead>
<tr>
<th>Poster</th>
<th>Title</th>
<th>Speaker</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>P15</td>
<td>Simple model of self-phase modulation spectral patterns in optical fibres</td>
<td>Sonia Boscolo, Aston University, UK</td>
<td></td>
</tr>
</tbody>
</table>

**Medical applications of light**

<table>
<thead>
<tr>
<th>Poster</th>
<th>Title</th>
<th>Speaker</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>P16</td>
<td>Singlet oxygen luminescence dosimetry with a fiber-coupled superconducting nanowire single-photon detector</td>
<td>Konstantinos Tsimvrakidis, University of Glasgow, UK</td>
<td></td>
</tr>
<tr>
<td>P17</td>
<td>Measurement of blood oxygenation in nailfold capillaries; a feasibility study in patients with systemic sclerosis and healthy controls</td>
<td>Michael Berks, The University of Manchester, UK</td>
<td></td>
</tr>
<tr>
<td>P18</td>
<td>The OPTA device: A novel miniature optical probe to evaluate tissue atrophy</td>
<td>Amrit Lotay, Durham University, UK</td>
<td></td>
</tr>
<tr>
<td>P19</td>
<td>A multimodality hybrid gamma-near infrared (NIR) fluorescence camera for intraoperative cancer surgery</td>
<td>Awad Almarhaby, University of Leicester, UK</td>
<td></td>
</tr>
<tr>
<td>P20</td>
<td>A concept of pixellated optics for low vision aids: Telescope Windows</td>
<td>Cyril Bourgenot, Durham University, UK</td>
<td></td>
</tr>
<tr>
<td>P21</td>
<td>Imaging ellipsometry as a novel detection method for protein-protein interactions</td>
<td>John Tomes, Aberystwyth University, UK</td>
<td></td>
</tr>
</tbody>
</table>

**Metamaterials and plasmonics**

<table>
<thead>
<tr>
<th>Poster</th>
<th>Title</th>
<th>Speaker</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>P22</td>
<td>Ultra low-loss super-resolution with extremely anisotropic semiconductor metamaterials</td>
<td>William Hart, Imperial College London, UK</td>
<td></td>
</tr>
<tr>
<td>P23</td>
<td>Unexpected constitutive properties in electromagnetism and metamaterials</td>
<td>Paul Kinsler, Lancaster University, UK</td>
<td></td>
</tr>
<tr>
<td>P24</td>
<td>Shaping longitudinal electric field profiles using wire metamaterials</td>
<td>Taylor Boyd, Lancaster University, UK</td>
<td></td>
</tr>
<tr>
<td>P25</td>
<td>Resonant state expansion generalised to magnetic, chiral, and bi-anisotropic open optical systems and metamaterials</td>
<td>Egor Muljarov, Cardiff University, UK</td>
<td></td>
</tr>
</tbody>
</table>
PHOTON 2018

P26  The multiphysics solution to Maxwell-Hydrodynamic Equations for modeling Terahertz generation from plasmonic metasurfaces
Wei E I Sha, University College London, UK

Mid-IR photonics

P27  Structure and optical properties of Er3+-doped gallium lanthanum sulfide (GLS) thin films prepared by femtosecond pulsed laser deposition
Kheir Albarkat, University of Leeds, UK

Nanophotonics

P28  Three dimensional (3D) photonic crystal composites with high refractive index thin films
Xu Zheng, University of Bristol, UK

P29  Direct laser ablation based diffractive polymer surface
Rajib Ahmed, University of Birmingham, UK

P30  Bio-inspired microstructures for surface functionality applications
Rajib Ahmed, University of Birmingham, UK

P31  The coherent random lasing based on PM597 laser dye doped-azobenzene polymer vesicles
Zhijia Hu, Hefei University of Technology, China

P32  Quantitative correlative light-electron microscopy of single plasmonic nanoparticles
Yisu Wang, Cardiff University, UK

P33  Towards high energy Q-switching erbium doped fibre laser
Hani Kbashi, Aston University, UK

P34  Optical properties of refractory metal based thin films for nanophotonic applications
Archan Banerjee, University of Glasgow, UK

P35  Towards a full 3D photonic bandgap structure in the near infrared region via back-filling of polymer templates
Lifeng Chen, University of Bristol, UK

P36  Spatial architecture impact in mediation open circuit voltage control of quantum solar cell recovery systems
Moustafa Osman, EAA, Egypt

Nonlinear Photonics

P37  Modulational instability and soliton dynamics in Lithium Niobate nano-waveguides
Andrey Gorbach, University of Bath, UK

P38  Rotating patterns of fully structured light in Kerr resonators
Gian-Luca Oppo, University of Strathclyde, UK

P39  Using of the Beam Divergence Diagnostic for Defining a Kerr Lens Effective Focal Length
Sabrina Leghmizi, University of Sciences and Technology Houari Boumouedienne (USTHB), Algeria

P40  All optical push-broom dynamics
Baldeep Kaur, University of Greenwich, UK

P41  Nonlinear fourier transform analysis of a mode-locked fibre laser
Morteza Kamalian Kopae, Aston University, UK

P42  Nonlinear regimes governed by parametric interaction in micro-cavities
Luigi Di Lauro, University of Sussex, UK

P43  Ultra-short pulsed all-fiber amplifier similariton erbium doped fiber lasers
Joanna Modupeh Hodasi, University of Ghana, Ghana

P44  Giant multiphoton absorption for THz resonances in silicon hydrogenic donors
Nguyen Le, University of Surrey, UK

Optical and Quantum Metrology

P45  Calibration phantoms for optical coherence tomography
Yang Lu, Aston University, UK

P46  Optimal quantum metrology for quantum optical systems
Jasminder Sidhu, University of Sheffield, UK

P47  Passive broadband polarimeter based on a Fresnel cone
Ryan Hawley, University of Glasgow, UK

P48  Micro-Scale Optical Profilometry with Fiber Optic Lloyd’s Mirror
Gulsen Kosoglu, Marmara University, Turkey

Optical environmental sensing

P49  Developments in low cost laser detection
David Benton, Aston University, UK

P50  Limits on Mueller-polarimeter errors using the eigenvalue calibration method
Neil Bruce, Universidad Nacional Autonoma de México, Mexico

Optomechanics

P51  Optomechanical self-structuring of a Bose-Einstein Condensate
Gordon Robb, University of Strathclyde, UK

P52  Optomechanical self-structuring instabilities involving orbital angular momentum
Giuseppe Baio, University of Strathclyde, UK

P53  Development & field testing of an automated portable optomechanical accelerometer
Ying Liao Li, University College London, UK

Photonic systems and optical communications

P54  3D-printed double lenslet array for wide-angle static concentrating photovoltaics
Rakan Edrees M Alsaigh, University of Glasgow, UK
P55  Mitigation of noise-induced corruptions for nonlinear Fourier-based optical transmission methods
Maryna Pankratova, Aston University, UK

P56  The loglog growth of channel capacity for nondispersive nonlinear optical fiber channel in intermediate power range. Extension of the model.
Ivan Terekhov, Novosibirsk State University, Russia

P57  Single photon counting receivers for visible light communications
Steve Collins, University of Oxford, UK

P58  Low cost camera based laser detection
Sean Tipper, DSTL, UK

Quantum Coherent Control
P59  Lindblad dynamics of quantum walkers in optical lattices
Bradley Longstaff, Imperial College London, UK

Quantum Communication
P60  Low loss dielectric mirrors for cavity based single photon emission
Najwa Sidqi, Helia Photonics/Heriot Watt University, UK

Quantum dots, nanocrystals, and low dimensional materials
P61  Nano-cathodoluminescence and Carrier Dynamics in All-inorganic Perovskite Nanocrystals
Ruben Ahumada-Lazo, The University of Manchester, UK

P62  Experimental investigation of plasmon–exciton coupling in MBE InAs quantum dots and silver nanoparticles
Igor Gladskikh, ITMO University, Russia

P63  Ultrasensitive Time and Spectrally-Resolved Microscopy of Single Multiple Quantum Well Nanowire Lasers
Stefan Skalsky, The University of Manchester, UK

P64  Efficient excitation of a single molecule for photon generation
Ross C Schofield, Imperial College London, UK

P65  Luminescent carbon nanodots directly grown on Si-based substrates by chemical vapor deposition
Rui Huang, Hanshan Normal University, China

Quantum Information
P66  Evaluating the Propagator in Quantum field Theory
Lucky Ucho, College of Education, Ekiadolor-Benin, Nigeria

Quantum Optics
P67  Speed limits for quantum photonics
Peter Barrow, Heriot Watt University, UK

P68  A new explanation for the color variety of photons
Mohammadjavad Faraji, Saleh Research Centre, Iran

P69  Many-body physics with quantum simulators
Stuart Flannigan, University of Strathclyde, UK

P70  Nonlocal coherent perfect absorption
John Jeffers, University of Strathclyde, UK

Strong light matter interactions and laser processing
P71  Laser processing inside diamond with ultrashort pulses
Salter Patrick, University of Oxford, UK

P72  Design and fabrication of versatile optical cavities for quantum networks
Thomas H Doherty, University of Oxford, UK

Trapping and Manipulation
P73  Optimisation and quality control of optical trapping in bespoke hydrogels
Jenna James, University of Nottingham, UK

P74  Levitated electromechanics
James Millen, King’s College London, UK

Ultrafast Optics
P75  Sintering different concentrations of iron doped calcium phosphate biomaterials using femtosecond laser for tissue engineering
Emaan Alsubhe, University of Leeds, UK

P76  Simulation and observation of the Talbot effect in cylindrical symmetry based on the orbital angular momentum
Nourah Almuhawish, University of Glasgow, UK

P77  Broad-band impulsive vibrational spectroscopy to detect raman signal of molecules at time domain
Chunyong Li, Durham University, UK

Waveguide and fibre optic devices and sensors
P78  High resolution SAW elastography for ex-vivo porcine skin specimen
Kairui Feng, University of Dundee, UK

P79  Optical fibre sensing of pH, temperature, turbidity and chemical species for nuclear industry applications
Jessica Hyde, University of Manchester, UK

P80  A fibre-tip Fabry-Pérot cavity for deterministic, strong atom-photon interactions
Marwan Mohammed, University of Oxford, UK

Novel and super-resolution microscopy
P81  Light-sheet microscopy beam path miniaturisation using optical MEMS
Ralf Bauer, University of Strathclyde, UK