

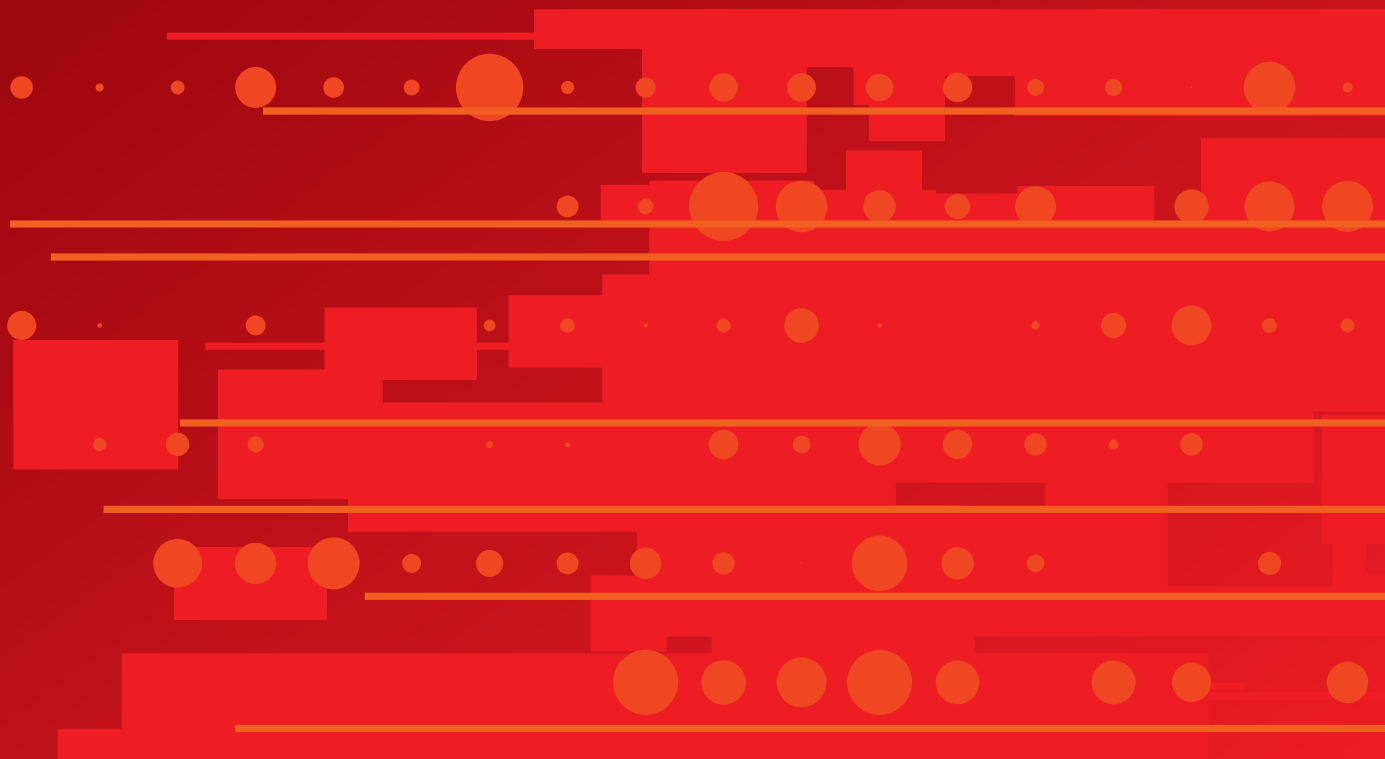
**SPIE.**

# MEDIA KIT 2025

---

CONNECTING MINDS. ADVANCING LIGHT.

[www.spie.org/advertising](http://www.spie.org/advertising)



# SPIE. MEDIA KIT 2025

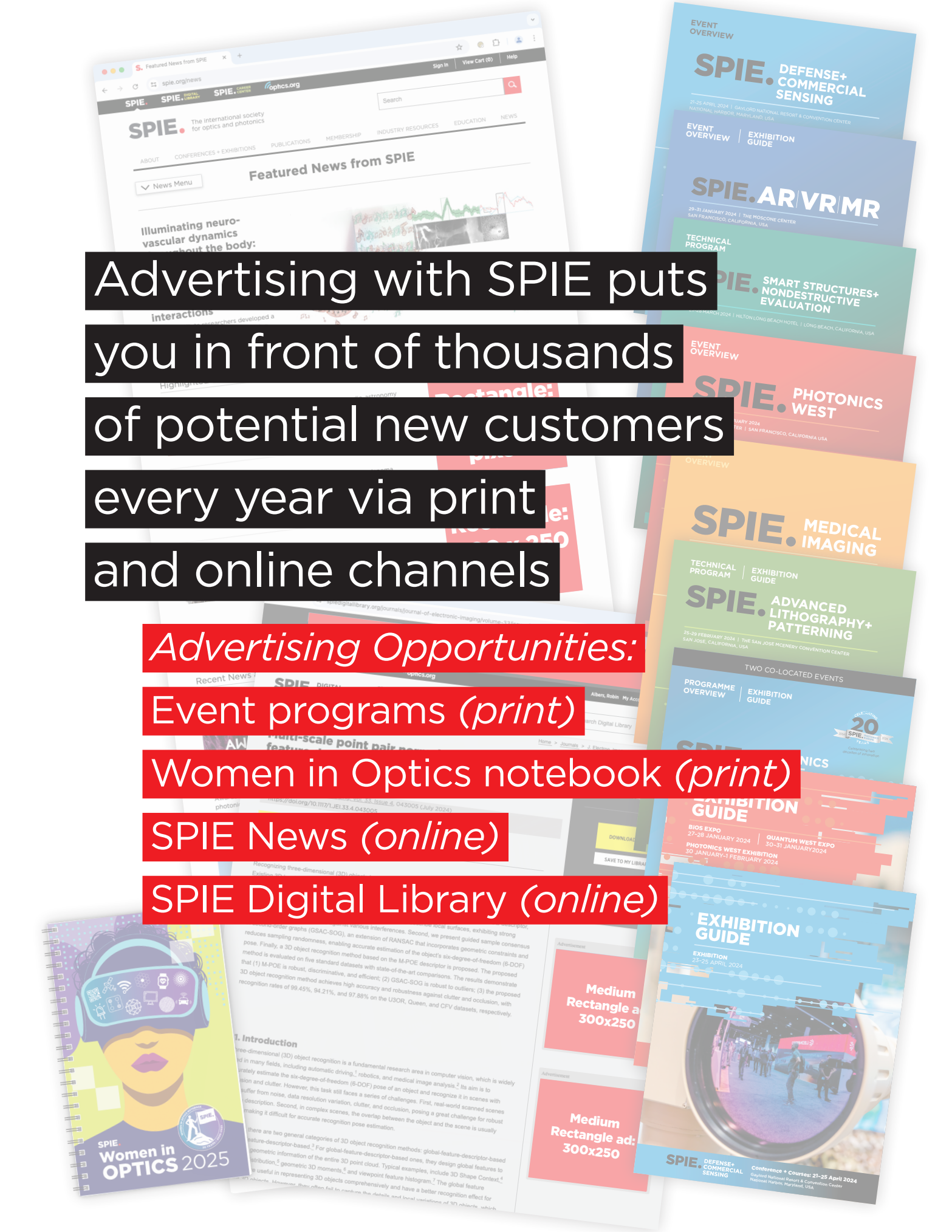
<a href="#">SPIE event printed pieces</a>	2
<a href="#">SPIE Women in Optics notebook</a>	8
<a href="#">SPIE News</a>	14
<a href="#">SPIE Digital Library</a>	17

Advertise to your target audience.

Partner with SPIE resources — technical communities and conferences, [optics.org](#), *Photonics Focus*, [SPIE.org](#), and the SPIE Digital Library — where we present news articles, hot topics, breaking developments, and the latest work in optics and photonics research, reaching viewers daily.

Contact SPIE Sales	<b>Kim Abair</b> , Sales Manager   Tel: +1 360 685 5499   <a href="mailto:kima@spie.org">kima@spie.org</a>
	<b>Lacey Barnett</b> , Sales Manager   Tel: +1 360 685 5551   <a href="mailto:laceyb@spie.org">laceyb@spie.org</a>
	<b>Melissa Valum</b> , Sales Manager   Tel: +1 360 685 5596   <a href="mailto:melissav@spie.org">melissav@spie.org</a>
	PO Box 10, Bellingham, WA 98227-0010 USA Tel: +1 360 676 3290   Fax: +1 360 647 1445   <a href="mailto:spiesales@spie.org">spiesales@spie.org</a>   <a href="http://www.spie.org/advertising">www.spie.org/advertising</a>
SPIE Europe Office	<b>Laurence Devereux</b> , Sales Consultant   Tel: +44 29 2278 9031   <a href="mailto:laurence@spieeurope.org">laurence@spieeurope.org</a>
	2 Alexandra Gate, Ffordd Pengam, Cardiff, CF24 2SA Tel: +44 29 2089 4747   <a href="mailto:info@spieeurope.org">info@spieeurope.org</a>
For <a href="#">optics.org</a> and SPIE Photonics West Show Daily advertising, contact	<b>Rob Fisher</b> , Head of Sales & Marketing   Tel: +44 117 905 5330   <a href="mailto:rob.fisher@optics.org">rob.fisher@optics.org</a>
	<b>Malaya Plummer</b> , Media Sales Executive   Tel: +44 117905 5351   <a href="mailto:malaya.plummer@optics.org">malaya.plummer@optics.org</a>





Advertising with SPIE puts  
you in front of thousands  
of potential new customers  
every year via print  
and online channels

*Advertising Opportunities:*

Event programs (*print*)

Women in Optics notebook (*print*)

SPIE News (*online*)

SPIE Digital Library (*online*)

# SPIE event printed pieces



## Event overviews

Distributed onsite to all technical attendees, this piece reaches research and development professionals in different fields with news of your products and services. Most people will keep this piece in hand during the event, providing you with an opportunity to gain visibility.



## Exhibition guides

Distributed at select events, this handy guide features exhibitor information and show floor locations. Increase your impact on your primary target audience with an ad in the frequently used exhibition guide.



[www.spie.org/events](http://www.spie.org/events)

## Reach thousands of potential customers who use SPIE event pieces to plan their agendas

2025 FEATURED EVENT	DATES / LOCATION	CONFERENCE TOPICS	EST. ATTENDANCE	EVENT OVERVIEW	EVENT OVERVIEW/ EXHIBITION GUIDE
<b>SPIE.</b> <b>PHOTONICS WEST</b> <b>SPIE.</b> <b>PHOTONICS WEST BIOS</b> <b>SPIE.</b> <b>QUANTUM WEST</b>	25–30 January 2025 San Francisco, California, USA <b>PHOTONICS WEST EXHIBITION:</b> 28–30 January 2025 <b>BIOS EXPO:</b> 25–26 January 2025 <b>QUANTUM WEST EXPO:</b> 28–29 January 2025	<b>Photonics West OPTO and LASE</b> • Laser sources • Nonlinear optics and beam guiding • Micro/nano applications • Macro applications • Optoelectronic materials and devices • Photonic integration • Nanotechnologies in photonics • MOEMS-MEMS in photonics • Advanced quantum and optoelectronic applications • Semiconductor lasers and LEDs • Displays and holography • Optical communications: Devices to systems • 3D printing • Sustainability • AI/ML • Quantum <b>BIOS</b> • Photonic therapeutics and diagnostics • Neurophotonics, neurosurgery, and optogenetics • Clinical technologies and systems • Tissue optics, laser-tissue interaction, and tissue engineering • Biomedical spectroscopy, microscopy, and imaging • Nano/biophotonics • BRAIN • Translational research • 3D printing • Net Zero, AI/ML • Quantum Biology <b>Quantum West</b> • Quantum information systems • Quantum communications • Quantum computing and simulation • Quantum sensing, imaging, and timing systems • Enabling materials, devices, and techniques • Quantum Biology	20,000	✓	✓
<b>SPIE.AR VR MR</b>	27–29 January 2025 San Francisco, California, USA <b>EXHIBITION:</b> 28–29 January 2025	3D computer vision/perception • display techniques/technologies/architectures • reconstruction • combiner optics/related architectures • human-machine interactions • human perception/immersive displays • light-field rendering • MEMS mirrors • display engines/imaging systems • optical sensors for 6DOF head tracking/SLAM-relocalization nanophotonics	3,000	✓	
<b>SPIE.</b> <b>MEDICAL IMAGING</b>	16–20 February 2025 San Diego, California, USA	Physics of medical imaging • Image processing • Computer-aided diagnosis • Image-guided procedures, robotic interventions, and modeling • Molecular, structural, and functional imaging • Image perception, and technology assessment • PACS-based imaging informatics • Ultrasonic imaging, tomography, and therapy • Digital pathology	1,000	✓	
<b>SPIE.</b> <b>ADVANCED LITHOGRAPHY+ PATTERNING</b>	23–27 February 2025 San Jose, California, USA <b>EXHIBITION:</b> 25–26 February 2025	Optical and EUV Nanolithography • DTCO • Patterning • Metrology • Inspection • Process Control • Resists • Etch • Process Integration • DUV and EUV sources and optics	2,000		✓
<b>SPIE.</b> <b>SMART STRUCTURES+ NONDESTRUCTIVE EVALUATION</b>	17–20 March 2025 Vancouver, BC, Canada	Electroactive polymers • Smart structures and materials • Actuators and damping • Biomimetics • Energy harvesting • Embedded sensors • Sensor networks • Real-time NDE • Structural health monitoring • Fiber sensors	700	✓	
<b>SPIE.</b> <b>OPTICS+ OPTOELECTRONICS</b>	7–10 April 2025 Prague, Czech Republic <b>EXHIBITION:</b> 8–10 April 2025	Recent advances in petawatt photonics • High-power and high-repetition rate systems • Diode-pumped laser systems • FELs and X-ray lasers • Optical sensing • Holography • X-ray optics • Metamaterials • Nonlinear and quantum optics	700		✓
<b>SPIE.</b> <b>DEFENSE+ COMMERCIAL SENSING</b>	13–17 April 2025 Orlando, Florida, USA <b>EXHIBITION:</b> 15–17 April 2025	Next generation sensor systems and applications • Advanced sensing and imaging • Imaging and analytics • Materials and devices • Big data • AI/ML • Autonomous systems • AR/VR/ XR • Cyber security • Advanced photon counting • IR Technology	3,500	✓	✓
<b>SPIE.</b> <b>DIGITAL OPTICAL TECHNOLOGIES</b> <b>SPIE.</b> <b>OPTICAL METROLOGY</b>	23–26 June 2025 Munich, Germany	<b>Digital Optical Technologies</b> • Latest advances in digital optic and photonic systems, including design and fabrication using digital means, as well as components application <b>Metrology</b> • Emerging photonics fields within measurement systems, modeling, imaging, sensing, and inspection	500	✓	
<b>SPIE.</b> <b>PHOTONICS FOR QUANTUM</b>	June 2025 Waterloo, Ontario, Canada	Quantum computing and simulation • Quantum Communications and Networks • Quantum sensing, imaging and timing systems • Quantum materials and devices • Quantum information systems	75	✓	
<b>SPIE.</b> <b>OPTICS+ PHOTONICS</b>	3–7 August 2025 San Diego, California, USA <b>EXHIBITION:</b> 5–7 August 2025	Advanced metrology • Remote sensing • Optical system design • Illumination engineering • Photovoltaics • Thin film coatings • Illumination systems • Solar concentrators • Plasmonics • Nanoengineered materials • Metamaterials • Nanocoatings • Nanomanufacturing • Organic photonics and electronics • Detectors and imaging • Photonic devices • OLEDs and LEDs • Lasers • Astronomical optics and instrumentation	3,000		✓
<b>SPIE.</b> <b>SENSORS+ IMAGING</b>	8–11 September 2025 Madrid, Spain <b>EXHIBITION:</b> 9–10 September 2025	<b>Remote Sensing</b> • Atmospheric sensing • Platforms and systems • Environmental monitoring and applications • Earth surface sensing • Image and signal processing <b>Security + Defence</b> • Electro-optical sensing • Infrared systems • Optical materials and technologies • Sensors and networks • Millimetre wave and terahertz sensors • Biomaterials	900	✓	
<b>SPIE.</b> <b>PHOTOMASK TECHNOLOGY + EUV LITHOGRAPHY</b>	21–25 September 2025 Monterey, California, USA <b>EXHIBITION:</b> 23–24 September 2025	<b>Photomask</b> • Design automation and data prep • Inverse lithography • Mask writing • Defects • Metrology • Inspection and repair • Maskless processes <b>EUV Lithography</b> • Sources and optics • Metrology and inspection • Mask and imaging • Pellicles • Resists • Process control and stochastics • Patterning and process enhancement • Extendibility • High-NA EUV	700		✓
<b>SPIE.</b> <b>PHOTONICS INDUSTRY SUMMIT</b>	24 September 2025 Washington, DC	Industry leaders connect with policy makers to facilitate collaboration on addressing industry challenges	175		
<b>SPIE.</b> <b>LASER DAMAGE</b>	20–22 October 2025 Rochester, New York, USA	Optical materials and measurements • Surfaces, mirrors and contamination • Thin films • Fundamental mechanisms • Laser-induced damage issues • Applications of laser damage • Properties modeling • Testing • Component fabrication	155	✓	
<b>SPIE.OPTIFAB</b>	20–23 October 2025 Rochester, New York, USA <b>EXHIBITION:</b> 21–23 October 2025	Optical fabrication equipment • Optical components, materials, and systems • Optomechanical components and devices • Laser system components • Optical thin film coating • Optical metrology and testing equipment • Clean room equipment • Adhesives, glass, and consumables • Software for design, simulation and testing • Metrology systems	2100	✓	
<b>SPIE.PHOTONEX</b>	October 2025 TBD	Quantum technologies • Photonics • Biophotonics • Lasers • Optical technologies • Materials analysis • Nanotechnology and thin film coatings • Vacuum equipment and in-vacuum technologies	700		✓
<b>SPIE.</b> <b>PHOTONICS ASIA</b>	October 2025 Beijing, China	High-power lasers • Semiconductor lasers • Optoelectronic devices and integration • Optical design and testing • Holography • Diffractive optics • Biomedical optics • Advanced sensor systems • Nanophotonics and micro/nano-optics • Plasmonics • Quantum and nonlinear optics	800	✓	
<b>SPIE.</b> <b>FUTURE SENSING TECHNOLOGIES</b>	11–13 November 2025 Yokohama, Japan	Quantum sensing • Cameras and imaging systems • AR/VR • Optical communications • Space-based missions • RADAR systems • Multi-band and hyperspectral imaging • LIDAR technology and applications • Polarization sensing and imaging • EO/IR/SWIR sensing and imaging • UAV applications • Autonomous vehicle sensing • Sensor-based sorting & quality control	125	✓	

2025 insertion order

Contact SPIE Sales:

**Kim Abair**  
Sales Manager  
Tel: +1 360 685 5499  
kima@spie.org

**Lacey Barnett**  
Sales Manager  
Tel: +1 360 685 5551  
laceyb@spie.org

**Melissa Valum**  
Sales Manager  
Tel: +1 360 685 5596  
melissav@spie.org

Fax: +1 360 647 1445  
www.spie.org/advertising

SPIE Europe Office:

**Laurence Devereux**  
Sales Consultant  
Tel: +44 29 2278 9031  
laurence@spieeurope.org

For optics.org and SPIE  
Photonics West Show  
Daily advertising, contact:

**Rob Fisher**  
Head of Sales & Marketing  
Tel: +44 117 905 5330  
rob.fisher@optics.org

**Malaya Plummer**  
Media Sales Executive  
Tel: +44 117905 5351  
malaya.plummer@optics.org

51145

1 PLEASE PROVIDE COMPLETE BILLING INFORMATION

My company is an SPIE Corporate Member ☐ No ☐ Yes Corporate ID# \_\_\_\_\_

Advertising company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State/Prov. \_\_\_\_\_ Zip \_\_\_\_\_

Contact \_\_\_\_\_ Title \_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_ ☐ Bill to advertising company (not ad agency)

Ad agency \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State/Prov. \_\_\_\_\_ Zip \_\_\_\_\_

Contact \_\_\_\_\_ Title \_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_ P.O. (if required for billing) \_\_\_\_\_

2 SELECT ADVERTISEMENT

☐ Event overview or ☐ Exhibition guide

Insertion order due 6 December 2024

Materials due 13 December 2024

Ad size	Black and white	4-color
Full page	<input type="checkbox"/> \$1,375	<input type="checkbox"/> \$2,995
2/3 Page	<input type="checkbox"/> \$1,100	<input type="checkbox"/> \$2,595
1/2 Page vertical	<input type="checkbox"/> \$950	<input type="checkbox"/> \$2,495
1/2 Page horizontal	<input type="checkbox"/> \$950	<input type="checkbox"/> \$2,495
1/3 Page	<input type="checkbox"/> \$695	<input type="checkbox"/> \$2,250
1/4 Page	<input type="checkbox"/> \$550	<input type="checkbox"/> \$2,100
Special position	4-color	
Cover 2 - inside front	<input type="checkbox"/> \$4,595	
Cover 3 - inside back	<input type="checkbox"/> \$4,495	
Cover 4 - back cover	<input type="checkbox"/> \$5,100	
Page 3	<input type="checkbox"/> \$4,150	
Page 5	<input type="checkbox"/> \$4,150	
Page 7	<input type="checkbox"/> \$4,150	
Other righthand forward pages available upon request.		

SEE NEXT PAGE FOR:  
• MECHANICAL REQUIREMENTS  
• ELECTRONIC FILE REQUIREMENTS  
• AD SUBMISSION GUIDELINES  
• POLICIES

3 AGREEMENT By signing, you agree to abide by the policies listed. Signature required.

Ordered by \_\_\_\_\_ Title \_\_\_\_\_

Authorizing signature \_\_\_\_\_

4 PAYMENT INFORMATION Billed after publication prints. Please check one of the following options:

☐ Check/money order enclosed (payable to SPIE) ..... = \$ \_\_\_\_\_

☐ Credit card  
SPIE accepts VISA, MasterCard, American Express, Diners Club, and Discover cards ..... = \$ \_\_\_\_\_

☐ Wire transfer ..... = \$ \_\_\_\_\_  
Bank wire transfer information will be sent to you.

☐ Please send invoice upon receipt of this contract.



## MECHANICAL REQUIREMENTS

TRIM size - Program will be cut to this size.

BLEED size - Background images need to be slightly larger than trim so it looks like it goes off the edge.

LIVE area - Keep all text and important elements inside live area so they do not get cut off when program is bound and trimmed after printing.

**IMPORTANT:  
PLEASE REMOVE ALL PRINTER MARKS  
INCLUDING REGISTRATION AND  
CROP MARKS FROM YOUR AD FILE**

## Event overview or exhibition guide

Ad size	Inches	Millimeters
Full page		
Trim size	$8 \frac{3}{8} \times 10 \frac{3}{4}$	213 × 273
Bleed	$8 \frac{3}{4} \times 11 \frac{1}{8}$	222 × 283
Live area	7 × 10	178 × 254
2/3 Page	$4 \frac{9}{16} \times 10$	116 × 254
1/2 Page vertical	$3 \frac{5}{16} \times 10$	84 × 254
1/2 Page horizontal	$7 \times 4 \frac{7}{8}$	178 × 124
1/3 Page vertical	$2 \frac{3}{16} \times 10$	56 × 254
1/4 Page	$3 \frac{5}{16} \times 4 \frac{7}{8}$	84 × 124
<b>Special position</b>		
Cover 2 - inside front*		
Cover 3 - inside back*		
Cover 4 - back cover*		
Page 3*		<i>*see full-page ad specs above</i>
Page 5*		
Page 7*		
Other righthand forward pages available upon request.		

## ELECTRONIC FILE REQUIREMENTS

- AD SHOULD BE FURNISHED AS A HIGH-RESOLUTION PDF (at least 300 dpi). Fonts must be embedded, outlined, or included. All colors should be CMYK builds. Note: eps, jpg, and tif files will be accepted but PDF IS PREFERRED.
- Keep essential matter of an ad (text or image) inside the live area or 1/4" inside TRIM.
- PLEASE REMOVE ALL PRINTER MARKS INCLUDING REGISTRATION AND CROP MARKS FROM YOUR AD FILE.

## AD MATERIAL SUBMISSION GUIDELINES

- Ads can be emailed (files <5 MB may be emailed to [advertising@spie.org](mailto:advertising@spie.org)).
- Please contact [advertising@spie.org](mailto:advertising@spie.org) with questions about ad submissions.

## POLICIES

- Changes or modifications to submitted ad materials may be subject to production charges.
- SPIE does not guarantee reproduction quality for late ads or ads that do not meet the mechanical and electronic file requirements.
- Ad materials are stored for 12 months, unless other arrangements have been made in writing.
- No refunds on ads cancelled after insertion order due dates.
- No guaranteed ad placement other than accepted special cover positions.
- SPIE reserves the right to cancel or reject any advertisement; this includes solicitation by organizations for membership and event attendees, authors or exhibitors, or products unrelated to the event.
- Simulation of the publication's format is not permitted.
- SPIE reserves the right to place the word "advertisement" with copy that, in the publisher's opinion, resembles editorial matter.
- All advertising is subject to publisher's approval and agreement by the advertiser and agency to indemnify and protect the publisher from and against any claims, loss, liability, or expense, including reasonable attorney's fees, arising out of publication of such advertisement.
- Ads received after the materials due dates are subject to a 10% surcharge.
- Recognized ad agencies will receive a 15% commission. Commissions given to ad agencies will be forfeited if payment is not received within 60 days of invoice date.
- Account delinquency may affect advertiser's and agency's ability to book space in future issues.
- For accounts with more than one unpaid invoice, all cash received will be paid to oldest invoice first.
- Advertiser and agency agree to pay all collection costs that result from our collection efforts on delinquent balances, including reasonable attorney's fees.

## LIABILITY

The publisher reserves the right to hold the advertiser and advertising agency jointly and severally liable to SPIE for payments due hereunder. The advertiser is at all times liable for payment of all account balances due and all other liabilities and deemed to receive refund payments, adjustments, notices and all other documents when the same are delivered to their advertising agency. Payments by the advertiser to the advertising agency for services does not constitute payment to SPIE. Any language to the contrary in any advertising agency's insertion orders or other documents is void and without effect.

## BILLING AND DISCOUNTS

- Billing and tear sheets will be mailed after the piece has been published. Payment must be made to SPIE within 30 days of invoice date. After 30 days, a 5% late fee will be added to all unpaid balances.
- Multiple ad placements per event receive a 10% discount for each additional ad.
- SPIE Corporate Members receive a 15% discount on published rates.

# SPIE EVENT ADVERTISING

## 2025 insertion order

Contact SPIE Sales:

**Kim Abair**  
Sales Manager  
Tel: +1 360 685 5499  
kima@spie.org

**Lacey Barnett**  
Sales Manager  
Tel: +1 360 685 5551  
laceyb@spie.org

**Melissa Valum**  
Sales Manager  
Tel: +1 360 685 5596  
melissav@spie.org

Fax: +1 360 647 1445  
www.spie.org/advertising

SPIE Europe Office:

**Laurence Devereux**  
Sales Consultant  
Tel: +44 29 2278 9031  
laurence@spieeurope.org

SEE NEXT PAGE FOR:

- MECHANICAL REQUIREMENTS
- ELECTRONIC FILE REQUIREMENTS
- AD SUBMISSION GUIDELINES
- POLICIES

### 1 PLEASE PROVIDE COMPLETE BILLING INFORMATION

My company is an SPIE Corporate Member ☐ No ☐ Yes Corporate ID# \_\_\_\_\_

#### Advertising company

Address \_\_\_\_\_

City \_\_\_\_\_ State/Prov. \_\_\_\_\_ Zip \_\_\_\_\_

Contact \_\_\_\_\_ Title \_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_ ☐ Bill to **advertising company** (not ad agency)

#### Ad agency

Address \_\_\_\_\_

City \_\_\_\_\_ State/Prov. \_\_\_\_\_ Zip \_\_\_\_\_

Contact \_\_\_\_\_ Title \_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_ P.O. (if required for billing) \_\_\_\_\_

### 2 SELECT ADVERTISEMENT *For Photonics West/BiOS, please use corresponding insertion order.*

	Event overview	Event overview/ exhibition guide	Exhibition guide	Insertion order due
SPIE Advanced Lithography + Patterning		<input type="checkbox"/>		7 Jan 2025
SPIE AR   VR   MR		<input type="checkbox"/>		6 Dec 2024
SPIE Defense + Commercial Sensing	<input type="checkbox"/>		<input type="checkbox"/>	25 Feb 2025
SPIE Future Sensing Technologies	<input type="checkbox"/>			4 Mar 2025
SPIE Digital Optical Technologies	<input type="checkbox"/> A4 size			3 May 2025
SPIE Laser Damage	<input type="checkbox"/>			1 Sept 2025
SPIE Medical Imaging*	<input type="checkbox"/>			27 Jan 2025
SPIE Optical Metrology	<input type="checkbox"/> A4 size			3 May 2025
SPIE Optics + Optoelectronics		<input type="checkbox"/> A4 size		7 Mar 2025
SPIE Optics + Photonics		<input type="checkbox"/>		17 June 2025
SPIE OPTIFAB		<input type="checkbox"/>		1 Sept 2025
SPIE Photomask Technology + EUV Lithography		<input type="checkbox"/>		13 Aug 2025
SPIE Photonex		<input type="checkbox"/> A4 size		1 Sept 2025
SPIE Photonics Industry Summit	<input type="checkbox"/>			8 Aug 2025
SPIE/RIT Photonics for Quantum	<input type="checkbox"/>			TBD
SPIE Sensors + Imaging* (Remote Sensing/Security + Defence)		<input type="checkbox"/> A4 size		21 July 2025
SPIE Smart Structures + Nondestructive Evaluation*	<input type="checkbox"/>			TBD
SPIE/COS Photonics Asia	<input type="checkbox"/>			26 Aug 2025
*40% discount— Medical Imaging, Sensors + Imaging, Smart Structures + Nondestructive Evaluation				

**Materials are due 7 days after insertion order due date. Please contact Sales for possible date changes.**

### 3 SPECIFY ADVERTISEMENT SIZE

<input type="checkbox"/> Event overview or <input type="checkbox"/> Event overview/exhibition guide or <input type="checkbox"/> Exhibition guide (Defense + Commercial Sensing)			
Ad size	Black and white	4-color	Special position 4-color
Full page	<input type="checkbox"/> \$1,395	<input type="checkbox"/> \$2,695	Cover 2 (inside front) <input type="checkbox"/> \$4,175
2/3 Page	<input type="checkbox"/> \$1,100	<input type="checkbox"/> \$2,350	Cover 3 (inside back) <input type="checkbox"/> \$3,995
1/2 Page vertical	<input type="checkbox"/> \$950	<input type="checkbox"/> \$2,250	Cover 4 (back cover) <input type="checkbox"/> \$4,350
1/2 Page horizontal	<input type="checkbox"/> \$950	<input type="checkbox"/> \$2,250	Page 3 <input type="checkbox"/> \$3,795
1/3 Page	<input type="checkbox"/> \$695	<input type="checkbox"/> \$1,995	Page 5 <input type="checkbox"/> \$3,795
1/4 Page	<input type="checkbox"/> \$550	<input type="checkbox"/> \$1,895	Page 7 <input type="checkbox"/> \$3,795

*Other righthand  
forward pages available  
upon request.*

### 4 AGREEMENT *By signing, you agree to abide by the policies listed. Signature required.*

Ordered by \_\_\_\_\_ Title \_\_\_\_\_

Authorizing signature \_\_\_\_\_

### 5 PAYMENT INFORMATION *Billed after publication prints. Please check one of the following options:*

☐ Check/money order enclosed (payable to SPIE) ..... = \$ \_\_\_\_\_

☐ Credit card  
SPIE accepts VISA, MasterCard, American Express, Diners Club, and Discover cards ..... = \$ \_\_\_\_\_

☐ Wire transfer ..... = \$ \_\_\_\_\_  
*Bank wire transfer information will be sent to you.*

☐ Please send invoice upon receipt of this contract.

51145

**SPIE.**

SPIE Sales · spiesales@spie.org · Tel: +1 360 676 3290 · Fax: +1 360 647 1445



## SPIE EVENT ADVERTISING

2025 insertion order

### MECHANICAL REQUIREMENTS

**TRIM SIZE** Program will be cut to this size.

**BLEED SIZE** Background imagery need to be larger than trim so it appears to go off the edge.

**LIVE AREA** Keep all text and important elements inside live area so they do not get cut off when program is bound and trimmed after printing.

**IMPORTANT:**  
**PLEASE REMOVE ALL PRINTER MARKS  
INCLUDING REGISTRATION AND CROP  
MARKS FROM YOUR AD FILE**

#### Event overview

#### Event overview/exhibition guide

#### Exhibition guide

Full page/special position

TRIM:  $8 \frac{3}{8} \times 10 \frac{3}{4}$  in. = 213 × 273 mm

BLEED:  $8 \frac{3}{4} \times 11 \frac{1}{8}$  in. = 222 × 283 mm

LIVE: 7 × 10 in. = 178 × 254 mm

Ad size	Inches	Millimeters
2/3 Page	$4 \frac{9}{16} \times 10$	115 × 254
1/2 Page vertical	$3 \frac{5}{16} \times 10$	84 × 254
1/2 Page horizontal	$7 \times 4 \frac{7}{8}$	178 × 124
1/3 Page vertical	$2 \frac{3}{16} \times 10$	56 × 254
1/4 Page	$3 \frac{5}{16} \times 4 \frac{7}{8}$	84 × 124

#### A4 SIZE FOR ALL EUROPEAN EVENTS

Full page/special position

TRIM: 8.27 × 11.69 in. = 210 × 297 mm

BLEED: 8.77 × 12.19 in. = 223 × 310 mm

LIVE: 7.27 × 10.69 in. = 185 × 272 mm

Ad size	Inches	Millimeters
2/3 Page	$4.75 \times 10.69$	121 × 272
1/2 Page vertical	$3.5 \times 10.69$	89 × 272
1/2 Page horizontal	$7.27 \times 5$	185 × 127
1/3 Page vertical	$2.25 \times 10.69$	57 × 272
1/4 Page	$3.5 \times 5$	89 × 127

### ELECTRONIC FILE REQUIREMENTS

- AD SHOULD BE FURNISHED AS A HIGH-RESOLUTION PDF (at least 300 dpi). Fonts must be embedded, outlined, or included. All colors should be CMYK builds. Note: eps, jpg, and tif files will be accepted but PDF IS PREFERRED.
- Keep essential matter of an ad (text or image) inside the live area or 1/4" inside TRIM.
- PLEASE REMOVE ALL PRINTER MARKS INCLUDING REGISTRATION AND CROP MARKS FROM YOUR AD FILE.

### AD MATERIAL SUBMISSION GUIDELINES

- Ads can be emailed (files <5 MB may be emailed to [advertising@spie.org](mailto:advertising@spie.org))
- Please contact [advertising@spie.org](mailto:advertising@spie.org) with questions about ad submissions.

### POLICIES

- Changes or modifications to submitted ad materials may be subject to production charges.
- SPIE does not guarantee reproduction quality for late ads or ads that do not meet the mechanical and electronic file requirements.
- Ad materials are stored for 12 months, unless other arrangements have been made in writing.
- No refunds on ads cancelled after insertion order due dates.
- No guaranteed ad placement other than accepted special cover positions.
- SPIE reserves the right to cancel or reject any advertisement; this includes solicitation by organizations for membership and event attendees, authors or exhibitors, or products unrelated to the event.
- Simulation of the publication's format is not permitted.
- SPIE reserves the right to place the word "advertisement" with copy that, in the publisher's opinion, resembles editorial matter.
- All advertising is subject to publisher's approval and agreement by the advertiser and agency to indemnify and protect the publisher from and against any claims, loss, liability, or expense, including reasonable attorney's fees, arising out of publication of such advertisement.
- Ads received after the materials due dates are subject to a 10% surcharge.
- Recognized ad agencies will receive a 15% commission. Commissions given to ad agencies will be forfeited if payment is not received within 60 days of invoice date.
- Account delinquency may affect advertiser's and agency's ability to book space in future issues.
- For accounts with more than one unpaid invoice, all cash received will be paid to oldest invoice first.
- Advertiser and agency agree to pay all collection costs that result from our collection efforts on delinquent balances, including reasonable attorney's fees.

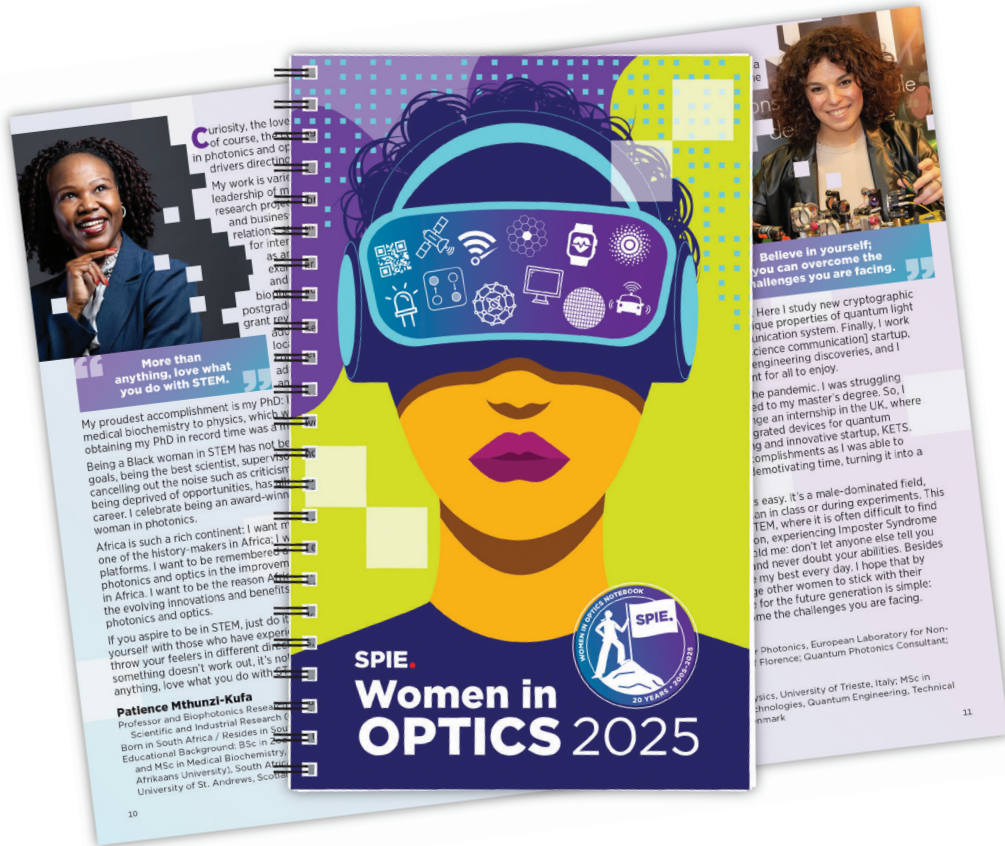
### LIABILITY

The publisher reserves the right to hold the advertiser and advertising agency jointly liable to SPIE for payments due hereunder. The advertiser is at all times liable for payment of all account balances due and all other liabilities and deemed to receive refund payments, adjustments, notices and all other documents when the same are delivered to their advertising agency. Payments by the advertiser to the advertising agency for services does not constitute payment to SPIE. Any language to the contrary in any advertising agency's insertion orders or other documents is void and without effect.

### BILLING AND DISCOUNTS

- Billing and tear sheets will be mailed after the piece has been published. Payment must be made to SPIE within 30 days of invoice date. After 30 days, a 5% late fee will be added to all unpaid balances.
- Multiple ad placements per event receive a 10% discount for each additional ad.
- SPIE Corporate Members receive a 15% discount on published rates.

# 2026 SPIE Women in Optics



**This popular notebook is distributed free of charge to 12,000 recipients who attend SPIE events and dozens of other conferences, tradeshow, outreach events, and school activities across 50 countries.**

## The notebook:

- Recognizes women's outstanding achievements in the fields of science, optics, and engineering, providing role models for young people.
- Profiles women who are involved with and working in the fields of science and engineering.
- Engages and inspires students to pursue careers in optics & photonics and other STEM (Science, Technology, Engineering and Mathematics) fields.
- Is available starting in August 2025 and distributed throughout 2026 with evergreen notebook pages.

## Enhance your current efforts to create visibility in the optics and photonics community through sponsorship opportunities in the 2026 Women in Optics Notebook:

- \$1,100 – sponsor logo on page 1 of notebook and on web page + 25 copies
- \$1,995 – full page advertisement in notebook, sponsor logo on page 1 of notebook and on web page + 50 copies
- \$2,295 – inside front cover full page advertisement, sponsor logo on page 1 of notebook and on web page + 100 copies
- \$2,650 – inside back cover full page advertisement, sponsor logo on page 1 of notebook and on web page + 75 copies
- \$2,995 – outside back cover full page advertisement, sponsor logo on page 1 of notebook and on web page + 200 copies

Contact SPIE Sales:

**Kim Abair**  
Sales Manager  
Tel: +1 360 685 5499  
kima@spie.org

**Lacey Barnett**  
Sales Manager  
Tel: +1 360 685 5551  
laceyb@spie.org

**Melissa Valum**  
Sales Manager  
Tel: +1 360 685 5596  
melissav@spie.org

Fax: +1 360 647 1445  
www.spie.org/advertising

### 1 PLEASE PROVIDE COMPLETE BILLING INFORMATION

Advertising company \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State/Prov. \_\_\_\_\_ Zip \_\_\_\_\_  
Contact \_\_\_\_\_ Title \_\_\_\_\_  
Telephone \_\_\_\_\_ Fax \_\_\_\_\_  
Email \_\_\_\_\_ ☐ Bill to **advertising company** (not ad agency)

**Ad agency** \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State/Prov. \_\_\_\_\_ Zip \_\_\_\_\_  
Contact \_\_\_\_\_ Title \_\_\_\_\_  
Telephone \_\_\_\_\_ Fax \_\_\_\_\_  
Email \_\_\_\_\_ P.O. (if required for billing) \_\_\_\_\_

### 2 SPECIFY AD SIZE

Insertion order due: 5 May 2025  
Materials due: 20 May 2025

Ad size	4-color
Page 1 sponsor logo	<input type="checkbox"/> \$1,100
Full page	<input type="checkbox"/> \$1,995
Special position	4-color
Cover 2 - inside front	<input type="checkbox"/> \$2,295
Cover 3 - inside back	<input type="checkbox"/> \$2,650
Cover 4 - back cover	<input type="checkbox"/> \$2,995

SEE NEXT PAGE FOR:

- MECHANICAL REQUIREMENTS
- ELECTRONIC FILE REQUIREMENTS
- AD SUBMISSION GUIDELINES
- POLICIES

### 3 AGREEMENT By signing, you agree to abide by the policies listed. Signature required.

Ordered by \_\_\_\_\_ Title \_\_\_\_\_  
Authorizing signature \_\_\_\_\_

### 4 PAYMENT INFORMATION Billed after publication prints. Please check one of the following options:

- ☐ Check/money order enclosed (payable to SPIE) ..... = \$ \_\_\_\_\_
- ☐ Credit card  
SPIE accepts VISA, MasterCard, American Express, Diners Club, and Discover cards ..... = \$ \_\_\_\_\_
- ☐ Wire transfer ..... = \$ \_\_\_\_\_  
Bank wire transfer information will be sent to you.
- ☐ Please send invoice upon receipt of this contract.

### MECHANICAL REQUIREMENTS

Full page ads only:	Inches	Millimeters
Trim size	5 × 8	127 × 203
Full page with bleed	5 1/2 × 8 1/2	133 × 209.5
Full page live area	3 3/4 × 7	95.25 × 177.5

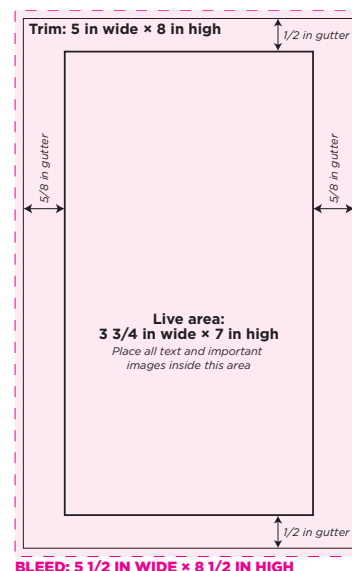
TRIM size - Notebook will be cut to this size.

BLEED size - Background images need to extend past each edge of page trim size.

LIVE area - Keep all text and important elements inside live area so they do not get cut off when planner is trimmed and bound after printing.

#### IMPORTANT:

**PLEASE REMOVE ALL PRINTER MARKS  
INCLUDING REGISTRATION AND  
CROP MARKS FROM YOUR AD FILE**



### ELECTRONIC FILE REQUIREMENTS

- AD SHOULD BE FURNISHED AS A HIGH-RESOLUTION PDF (at least 300 dpi). Fonts must be embedded, outlined, or included. All colors should be CMYK builds. Note: eps, jpg, and tif files will be accepted but PDF IS PREFERRED.
- Keep essential matter of an ad (text or image) 3/8" / 5/8" from the TRIM.
- PLEASE REMOVE ALL PRINTER MARKS INCLUDING REGISTRATION AND CROP MARKS FROM YOUR AD FILE.
- Sponsor logo listing file requirements: CMYK vector artwork saved as .AI or .EPS format with all fonts converted to outlines. Links or embedded files must be at least 300 dpi resolution.

### AD MATERIAL SUBMISSION GUIDELINES

- Ads can be emailed (files <5 MB may be emailed to [advertising@spie.org](mailto:advertising@spie.org)).
- Please contact [advertising@spie.org](mailto:advertising@spie.org) with questions about ad submissions.

### POLICIES

- Changes or modifications to submitted ad materials may be subject to production charges.
- SPIE does not guarantee reproduction quality for late ads or ads that do not meet the mechanical and electronic file requirements.
- Ad materials are stored for 12 months, unless other arrangements have been made in writing.
- No refunds on ads cancelled after insertion order due dates.
- No guaranteed ad placement other than accepted special cover positions.
- SPIE reserves the right to cancel or reject any advertisement; this includes solicitation by organizations for membership and event attendees, authors or exhibitors, or products unrelated to the event.
- Simulation of the publication's format is not permitted.
- SPIE reserves the right to place the word "advertisement" with copy that, in the publisher's opinion, resembles editorial matter.
- All advertising is subject to publisher's approval and agreement by the advertiser and agency to indemnify and protect the publisher from and against any claims, loss, liability, or expense, including reasonable attorney's fees, arising out of publication of such advertisement.
- Ads received after the materials due dates are subject to a 10% surcharge.
- Recognized ad agencies will receive a 15% commission. Commissions given to ad agencies will be forfeited if payment is not received within 60 days of invoice date.
- Account delinquency may affect advertiser's and agency's ability to book space in future issues.
- For accounts with more than one unpaid invoice, all cash received will be paid to oldest invoice first.
- Advertiser and agency agree to pay all collection costs that result from our collection efforts on delinquent balances, including reasonable attorney's fees.

### LIABILITY

The publisher reserves the right to hold the advertiser and advertising agency jointly and severally liable to SPIE for payments due hereunder. The advertiser is at all times liable for payment of all account balances due and all other liabilities and deemed to receive refund payments, adjustments, notices and all other documents when the same are delivered to their advertising agency. Payments by the advertiser to the advertising agency for services does not constitute payment to SPIE. Any language to the contrary in any advertising agency's insertion orders or other documents is void and without effect.

### BILLING AND DISCOUNTS

Billing and tear sheets will be mailed after the piece has been published. Payment must be made to SPIE within 30 days of invoice date. After 30 days, a 5% late fee will be added to all unpaid balances.

# SPIE News

Secure your ad placement alongside industry-specific editorial and access vital exposure to products and brands.

Capitalize on exposure to industry professionals with exclusive ad placement alongside the very latest featured news from SPIE.

Get your company logo or message in front of over 500,000 unique viewers and drive qualified traffic to your web properties with an ad on SPIE.org/news.

[www.spie.org/news](http://www.spie.org/news)

The screenshot displays the SPIE.org/news website. The header includes the SPIE logo, navigation links (ABOUT, CONFERENCES + EXHIBITIONS, PUBLICATIONS, MEMBERSHIP, INDUSTRY RESOURCES, EDUCATION, NEWS), and a search bar. The main content area is titled "Featured News from SPIE" and includes a "News Menu" dropdown. The featured news section highlights an article titled "Illuminating neuro-vascular dynamics throughout the body: 3D-printed implants and bioluminescence duet shed light on brain-spinal cord interactions" with a corresponding image. Below this, the "Highlighted Stories" section features three articles: "Heralding and navigating the radio-astronomy renaissance" (Events, Technology), "New biomarkers of response in melanoma immunotherapy" (Publications), and "Building a diverse quantum future" (Community). To the right of these stories are two red rectangular boxes, each labeled "Rectangle: 300 x 250 pixels". The "Recent News and Stories" section at the bottom displays a grid of nine articles, including "Celebrate excellence: 2025 SPIE Prism Awards open for outstanding photonics products" (Press Releases), "Black Sunday" (Community), "It's election season" (Community), "Reflecting hope: Concentrating solar power can feed the grid and perhaps even remove carbon from Earth's atmosphere" (Technology), "Light for clean water: Nano-enabled photonics technologies might ease the drought" (Technology), "Powering down: How optics technologies can reduce the energy costs of artificial intelligence and boost data center efficiency" (Technology), "Out of the blue: Shuji Nakamura's solo ascent to the Nobel Prize" (Technology), "Every chip counts: Considering the semiconductor industry's environmental impact" (Technology), and "Electroforming low-scatter optical components" (Technology). A "Load More" button is located at the bottom right of the grid.

**SPIE** The international society for optics and photonics

Search

ABOUT CONFERENCES + EXHIBITIONS PUBLICATIONS MEMBERSHIP INDUSTRY RESOURCES EDUCATION NEWS

News Menu

**Featured News from SPIE**

**Illuminating neuro-vascular dynamics throughout the body: 3D-printed implants and bioluminescence duet shed light on brain-spinal cord interactions**

Carney Institute researchers developed a set of novel imaging tools for studying sensory information processing

Publications

**Highlighted Stories**

**Rectangle: 300 x 250 pixels**

**Rectangle: 300 x 250 pixels**

**Recent News and Stories**

**PRISM20 AWARDS25**

Celebrate excellence: 2025 SPIE Prism Awards open for outstanding photonics products

Press Releases

**Black Sunday**

Community

**It's election season**

Community

**Reflecting hope: Concentrating solar power can feed the grid and perhaps even remove carbon from Earth's atmosphere**

Technology

**Light for clean water: Nano-enabled photonics technologies might ease the drought**

Technology

**Powering down: How optics technologies can reduce the energy costs of artificial intelligence and boost data center efficiency**

Technology

**Out of the blue: Shuji Nakamura's solo ascent to the Nobel Prize**

Technology

**Every chip counts: Considering the semiconductor industry's environmental impact**

Technology

**Electroforming low-scatter optical components**

Technology

Load More

Contact SPIE Sales:

**Kim Abair**  
Sales Manager  
Tel: +1 360 685 5499  
kima@spie.org

**Lacey Barnett**  
Sales Manager  
Tel: +1 360 685 5551  
laceyb@spie.org

**Melissa Valum**  
Sales Manager  
Tel: +1 360 685 5596  
melissav@spie.org

Fax: +1 360 647 1445  
www.spie.org/advertising

Prices listed are in US dollars,  
per month rate.

Sign up for six or more ads  
and get a 20% discount.

### 1 PLEASE PROVIDE COMPLETE BILLING INFORMATION

My company is an SPIE Corporate Member ☐ No ☐ Yes Corporate ID# \_\_\_\_\_

**Advertising company** \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State/Prov. \_\_\_\_\_ Zip \_\_\_\_\_

Contact \_\_\_\_\_ Title \_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_ ☐ Bill to **advertising company** (not ad agency)

**Ad agency** \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State/Prov. \_\_\_\_\_ Zip \_\_\_\_\_

Contact \_\_\_\_\_ Title \_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_ P.O. (if required for billing) \_\_\_\_\_

### 2 SPECIFY MONTHS TO RUN YOUR AD

	Rectangle ad 300 x 250 pixels; File size: 20k	Please choose months to run your ad:
<b>Newsroom ad on website</b>	\$1,850	<input type="checkbox"/> January <input type="checkbox"/> February <input type="checkbox"/> March <input type="checkbox"/> April <input type="checkbox"/> May <input type="checkbox"/> June <input type="checkbox"/> July <input type="checkbox"/> August <input type="checkbox"/> September <input type="checkbox"/> October <input type="checkbox"/> November <input type="checkbox"/> December

### 3 AGREEMENT By signing, you agree to abide by the policies listed. Signature required.

Ordered by \_\_\_\_\_ Title \_\_\_\_\_

Authorizing signature \_\_\_\_\_

### 4 PAYMENT INFORMATION Billed after publication prints. Please check one of the following options:

☐ Check/money order enclosed (payable to SPIE) ..... = \$ \_\_\_\_\_

☐ Credit card  
SPIE accepts VISA, MasterCard, American Express, Diners Club, and Discover cards ..... = \$ \_\_\_\_\_

☐ Wire transfer ..... = \$ \_\_\_\_\_  
Bank wire transfer information will be sent to you.

☐ Please send invoice upon receipt of this contract.



#### **ELECTRONIC FILE REQUIREMENTS**

- Materials due 10 business days prior to ad posting.
- Units are in pixels. File type: gif or jpg (web ready). Ads must be set up to the correct dimensions shown on previous page. Average file size 20K.
- Ads may be emailed to [advertising@spie.org](mailto:advertising@spie.org)
- Please contact us with any questions you have about ad submissions: [advertising@spie.org](mailto:advertising@spie.org)

#### **POLICIES**

- Changes or modifications to submitted ad materials may be subject to production charges.
- SPIE does not guarantee reproduction quality for late ads or ads that do not meet the ad material submission guidelines.
- Ad materials are stored for 12 months, unless other arrangements have been made in writing.
- No refunds on ads cancelled after insertion order due dates.
- No guaranteed ad placement position.
- SPIE reserves the right to cancel or reject any advertisement; this includes solicitation by organizations for membership and event attendees, authors or exhibitors, or products unrelated to the event.
- Simulation of the publication's format is not permitted.
- SPIE reserves the right to place the word "advertisement" with copy which, in the publisher's opinion, resembles editorial matter.
- All advertising is subject to publisher's approval and agreement by the advertiser and agency to indemnify and protect the publisher from and against any claims, loss, liability, or expense, including reasonable attorney's fees, arising out of publication of such advertisement.
- Ad materials received after the materials due dates are subject to a 10% surcharge.
- Recognized ad agencies will receive a 15% commission.
- Commissions given to ad agencies will be forfeited if payment is not received within 60 days of invoice date.
- Account delinquency may affect advertiser's and agency's ability to book space in future issues.
- For accounts with more than one unpaid invoice, all cash received will be paid to oldest invoice first.
- Advertiser and agency agree to pay all collection costs that result from our collection efforts on delinquent balances, including reasonable attorney's fees.

#### **LIABILITY**

The publisher reserves the right to hold the advertiser and advertising agency jointly and severally liable to SPIE for payments due hereunder. The advertiser is at all times liable for payment of all account balances due and all other liabilities and deemed to receive refund payments, adjustments, notices and all other documents when the same are delivered to their advertising agency. Payments by the advertiser to the advertising agency for services does not constitute payment to SPIE. Any language to the contrary in any advertising agency's insertion orders or other documents is void and without effect.

#### **BILLING AND DISCOUNTS**

- Invoice will be included with the customer's confirmation email. Payment must be paid to SPIE by the 15th of the month prior to the month your ad is scheduled. Eg: if your ad is scheduled for July, your payment is due 15 June.
- SPIE Corporate Members receive a 5% discount on published rates.

# SPIE Digital Library

The SPIE Digital Library is the world's largest collection of optics and photonics applied research with over 625,000 publications and over 10 million page views each year.

## Web

Ad displays on all 625,000+ publication pages and journal article pages, and eBook chapter pages.

The screenshot displays the SPIE Digital Library website interface. At the top, a red banner reads "Leaderboard ad: 970x90". Below this is the site's navigation bar, including the SPIE logo, "DIGITAL LIBRARY", "CAREER CENTER", and "optics.org". A search bar is located on the right. The main content area features a journal article titled "Multi-scale point pair normal encoding for local feature description and 3D object recognition" by Chu'ai Zhang, Yating Wang, Qiao Wu, Jiangbin Zheng, Jiaqi Yang, Siwen Qian, and Yanning Zhang. The article is from the "Journal of Electronic Imaging, Vol. 33, Issue 4, 043005 (July 2024)". To the right of the article, a sidebar contains a "JOURNAL ARTICLE" section with a "24 PAGES" indicator, a "DOWNLOAD PAPER" button, a "SAVE TO MY LIBRARY" button, and a "GET CITATION" button. Below the article, there are two "Medium Rectangle ad: 300x250" placeholders. The article text includes an abstract and an introduction section.

4 July 2024

### Multi-scale point pair normal encoding for local feature description and 3D object recognition

*Chu'ai Zhang, Yating Wang, Qiao Wu, Jiangbin Zheng, Jiaqi Yang, Siwen Qian, Yanning Zhang*

*Author Affiliations +*

Journal of Electronic Imaging, Vol. 33, Issue 4, 043005 (July 2024)  
<https://doi.org/10.1117/1.JEI.33.4.043005>

ARTICLE ▼ FIGURES & TABLES REFERENCES CITED BY ▼

#### Abstract

Recognizing three-dimensional (3D) objects based on local feature descriptors is a highly challenging task. Existing 3D local feature descriptors rely on single-scale surface normals, which are susceptible to noise and outliers, significantly compromising their effectiveness and robustness. A multi-scale point pair normal encoding (M-POE) method for 3D object recognition is proposed. First, we introduce the M-POE descriptor, which encodes voxelized features with multi-scale normals to describe local surfaces, exhibiting strong distinctiveness and robustness against various interferences. Second, we present guided sample consensus in second-order graphs (GSAC-SOG), an extension of RANSAC that incorporates geometric constraints and reduces sampling randomness, enabling accurate estimation of the object's six-degree-of-freedom (6-DOF) pose. Finally, a 3D object recognition method based on the M-POE descriptor is proposed. The proposed method is evaluated on five standard datasets with state-of-the-art comparisons. The results demonstrate that (1) M-POE is robust, discriminative, and efficient; (2) GSAC-SOG is robust to outliers; (3) the proposed 3D object recognition method achieves high accuracy and robustness against clutter and occlusion, with recognition rates of 99.45%, 94.21%, and 97.88% on the U3OR, Queen, and CFV datasets, respectively.

#### 1. Introduction

Three-dimensional (3D) object recognition is a fundamental research area in computer vision, which is widely used in many fields, including automatic driving,<sup>1</sup> robotics, and medical image analysis.<sup>2</sup> Its aim is to accurately estimate the six-degree-of-freedom (6-DOF) pose of an object and recognize it in scenes with occlusion and clutter. However, this task still faces a series of challenges. First, real-world scanned scenes often suffer from noise, data resolution variation, clutter, and occlusion, posing a great challenge for robust feature description. Second, in complex scenes, the overlap between the object and the scene is usually limited, making it difficult for accurate recognition pose estimation.

Currently, there are two general categories of 3D object recognition methods: global-feature-descriptor-based and local-feature-descriptor-based.<sup>3</sup> For global-feature-descriptor-based ones, they design global features to encode the geometric information of the entire 3D point cloud. Typical examples, include 3D Shape Context,<sup>4</sup> 3D Shape Distribution,<sup>5</sup> geometric 3D moments,<sup>6</sup> and viewpoint feature histogram.<sup>7</sup> The global feature descriptors are useful in representing 3D objects comprehensively and have a better recognition effect for complete 3D objects. However, they often fail to capture the details and local variations of 3D objects, which

[www.spiedigitallibrary.org](http://www.spiedigitallibrary.org)

**SPIE.**

SPIE Sales · [spiesales@spie.org](mailto:spiesales@spie.org) · Tel: +1 360 676 3290 · Fax: +1 360 647 1445

Contact SPIE Sales:

**Kim Abair**  
Sales Manager  
Tel: +1 360 685 5499  
kima@spie.org

**Lacey Barnett**  
Sales Manager  
Tel: +1 360 685 5551  
laceyb@spie.org

**Melissa Valum**  
Sales Manager  
Tel: +1 360 685 5596  
melissav@spie.org

Fax: +1 360 647 1445  
www.spie.org/advertising

### 1 PLEASE PROVIDE COMPLETE BILLING INFORMATION

My company is an SPIE Corporate Member ☐ No ☐ Yes Corporate ID# \_\_\_\_\_

**Advertising company** \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State/Prov. \_\_\_\_\_ Zip \_\_\_\_\_

Contact \_\_\_\_\_ Title \_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_ ☐ Bill to **advertising company** (not ad agency)

**Ad agency** \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State/Prov. \_\_\_\_\_ Zip \_\_\_\_\_

Contact \_\_\_\_\_ Title \_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_ P.O. (if required for billing) \_\_\_\_\_

### 2 SPECIFY ADVERTISEMENT TYPE

<b>Leaderboard</b> 970 x 90 pixels	\$1,700		
<i>Please choose months to run your ad:</i>	<input type="checkbox"/> January	<input type="checkbox"/> February	<input type="checkbox"/> March
	<input type="checkbox"/> April	<input type="checkbox"/> May	<input type="checkbox"/> June
	<input type="checkbox"/> July	<input type="checkbox"/> August	<input type="checkbox"/> September
	<input type="checkbox"/> October	<input type="checkbox"/> November	<input type="checkbox"/> December
<b>Medium rectangle</b> 300 x 250 pixels	\$1,150		
<i>Please choose months to run your ad:</i>	<input type="checkbox"/> January	<input type="checkbox"/> February	<input type="checkbox"/> March
	<input type="checkbox"/> April	<input type="checkbox"/> May	<input type="checkbox"/> June
	<input type="checkbox"/> July	<input type="checkbox"/> August	<input type="checkbox"/> September
	<input type="checkbox"/> October	<input type="checkbox"/> November	<input type="checkbox"/> December

### 3 AGREEMENT *By signing, you agree to abide by the policies listed. Signature required.*

Ordered by \_\_\_\_\_ Title \_\_\_\_\_

Authorizing signature \_\_\_\_\_

### 4 PAYMENT INFORMATION *Please check one of the following options:*

☐ Check/money order enclosed (payable to SPIE) ..... = \$ \_\_\_\_\_

☐ Credit card  
SPIE accepts VISA, MasterCard, American Express, Diners Club, and Discover cards ..... = \$ \_\_\_\_\_

☐ Wire transfer ..... = \$ \_\_\_\_\_  
*Bank wire transfer information will be sent to you.*

☐ Please send invoice upon receipt of this contract.

Prices listed are in US dollars,  
per month rate.

51145

**ELECTRONIC FILE REQUIREMENTS**

- Materials due within 10 business days
- Units are in pixels. File type: gif or jpg (web ready). Ads must be set up to the correct dimensions shown on previous page. Average file size 20K. Set animated gif files to loop no more than 5 times.
- Ads may be emailed to [advertising@spie.org](mailto:advertising@spie.org)
- Please contact us with any questions you have about ad submissions: [advertising@spie.org](mailto:advertising@spie.org)

**POLICIES**

- Changes or modifications to submitted ad materials may be subject to production charges.
- SPIE does not guarantee reproduction quality for late ads or ads that do not meet the ad material submission guidelines.
- Ad materials are stored for 12 months, unless other arrangements have been made in writing.
- No refunds on ads cancelled after insertion order due dates.
- No guaranteed ad placement position.
- SPIE reserves the right to cancel or reject any advertisement; this includes solicitation by organizations for membership and event attendees, authors or exhibitors, or products unrelated to the event.
- Simulation of the publication's format is not permitted.
- SPIE reserves the right to place the word "advertisement" with copy which, in the publisher's opinion, resembles editorial matter.
- All advertising is subject to publisher's approval and agreement by the advertiser and agency to indemnify and protect the publisher from and against any claims, loss, liability, or expense, including reasonable attorney's fees, arising out of publication of such advertisement.
- Ad materials received after the materials due dates are subject to a 10% surcharge.
- Recognized ad agencies will receive a 15% commission.
- Commissions given to ad agencies will be forfeited if payment is not received within 60 days of invoice date.
- Account delinquency may affect advertiser's and agency's ability to book space in future issues.
- For accounts with more than one unpaid invoice, all cash received will be paid to oldest invoice first.
- Advertiser and agency agree to pay all collection costs that result from our collection efforts on delinquent balances, including reasonable attorney's fees.

**LIABILITY**

The publisher reserves the right to hold the advertiser and advertising agency jointly and severally liable to SPIE for payments due hereunder. The advertiser is at all times liable for payment of all account balances due and all other liabilities and deemed to receive refund payments, adjustments, notices and all other documents when the same are delivered to their advertising agency. Payments by the advertiser to the advertising agency for services does not constitute payment to SPIE. Any language to the contrary in any advertising agency's insertion orders or other documents is void and without effect.

**BILLING AND DISCOUNTS**

- Invoice will be emailed on the 1st of the month prior to ad being placed. If your ad is placed on June 1, your invoice will be sent on May 1. Payment must be paid to SPIE by the 15th of the month prior to the month your ad is scheduled; for example, if your ad is scheduled for July, your payment is due 15 June.
- SPIE Corporate Members receive a 5% discount on published rates.





**SPIE is the international society for optics and photonics**

International Headquarters

P.O. Box 10, Bellingham, WA 98227-0010 USA  
Tel: +1 360 676 3290 | Fax: +1 360 647 1445  
[customerservice@spie.org](mailto:customerservice@spie.org) | [spie.org](http://spie.org)

Shipping Address

1000 20th St., Bellingham, WA 98225-6705 USA

SPIE Europe

2 Alexandra Gate, Ffordd Pengam, Cardiff, CF24 2SA, UK  
Tel: +44 29 2089 4747 | [info@spieeurope.org](mailto:info@spieeurope.org)