

Optical Engineering

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Year in Review

Michael T. Eismann



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Last year brought some significant events in the world of optics, including the 60th anniversary of SPIE and the International Year of Light. Personally, I am inclined to include my first complete year as editor of *Optical Engineering*, but its significance pales in comparison to these other events. As we close the book on 2015, it is appropriate to review the state of the journal, reflect back on how it has evolved from its origins, and consider its future trajectory. With tremendous help from the journal staff, I have compiled some interesting information and trends concerning the technical content, publication statistics, review process, and author demographics for *Optical Engineering*.

During the course of 2015, 542 papers were published in *Optical Engineering*. Based on the download and citation statistics, topics of greatest interest include laser-based sensing, interferometry, multispectral imaging, wide field-of-view imaging, laser-based materials processing, and physical optics modeling. The most downloaded paper was published in the January 2015 issue: E. Puttonen et al., “Artificial target detection with a hyperspectral LiDAR over 24-h measurement.” The paper with the highest number of citations to date was published in the February 2015 issue: C. Falldorf et al., “Digital holography and quantitative phase contrast imaging using computational shear interferometry.” Congratulations to these authors on their excellent contributions to the field.

The total number of published papers represents about a 25% decrease from 2014, with the difference attributed almost entirely to fewer special sections. This was primarily a transient effect due to the 2014 transition in editorship, since the editor takes the lead on recruiting guest editors for special sections. I expect to reverse this trend in 2016, and have already arranged for one special section per volume well into 2017. If you are willing to serve as a guest editor and have a potential high-interest topic, please contact me, as I am always receptive to new ideas.

While limited in number, we published four excellent special sections in 2015 on emerging research and applications of fiber lasers, digital photoelasticity, complex light, and computational laser radar. Special section papers normally exhibit about twice the level of interest (as measured by downloads)

and impact (as measured by citations) compared to regular papers, making recruitment of guest editors for strong special sections a priority for me. Papers derived from conference presentations also exhibit higher interest and impact than regular papers, motivating a tighter connection between *Optical Engineering* and presenters and program committees of SPIE conferences. Approximately 11% of the 2015 *Optical Engineering* papers were derived from SPIE conference presentations. I am interested in seeing this percentage grow given the higher interest in these papers.

In terms of the review process, *Optical Engineering* continues to run smoothly. Processing of the 1447 submitted manuscripts resulted in 4795 review requests, for which 2790 individuals graciously accepted the request and performed thorough manuscript reviews. I consider this 57% acceptance rate a testament to the outstanding professional society commitment of our optical engineering community, and commend you for that. Due to this strong reviewer commitment along with the diligence of our journal staff and editorial board, our critical timelines (submission to first decision and acceptance to publication) remained steady at about 30–35 days each, on average. The acceptance rate has also remained unchanged at about 39%. In order to raise the overall quality of *Optical Engineering* publications, however, I am encouraging the editorial board to raise acceptance standards, which may impact this rate.

Author demographics of the 2015 *Optical Engineering* publications provide informative statistics. Roughly two-thirds of the publications originated from Asia, with about a quarter from the combination of North America and Western Europe. The rest of the world accounts for the remaining tenth. This represents a decrease in the published papers from North America and Western Europe, geographic regions that exhibit almost double the interest and impact based on statistics over the 2012 to 2015 time frame. In the future I would like to attract more contributions from North American and European constituents to achieve a more balanced geographic profile for the journal.

Looking back over the long history of the *Optical Engineering* journal, a few attributes stand out to me as central to the journal’s success: an emphasis on applied research and engineering; a balanced mix of contributing authors across academia, industry, and government laboratories; balanced geographic diversity; and a tight coupling with SPIE conferences. While the journal continues to provide an excellent venue for the publication of leading optical engineering developments, some of the recent trends indicate that a renewed emphasis on strengthening these foundations is in order. I will be looking to enhance these foundational attributes as we move forward into 2016, and look forward to your contributions to the journal’s continued success.

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Editor-in-Chief