

AIP | Library Matters

News for Librarians

AMERICAN INSTITUTE OF PHYSICS

SUMMER 2010

AIP Enhances Value of Journal Subscriptions

Rolling backfile replaced with online access back to 1999

AIP has always provided the physics community with world-class content. Year after year, AIP journals prove their value to researchers in all branches of science, engineering, and technology. Nowhere is evidence of this value more compelling than in the number of citations they receive. Again last year, *Applied Physics Letters* and *Journal of Applied Physics* ranked as the first and second most highly cited journals in Applied Physics as indexed by Thomson Reuters.

Look across our entire catalog and the story is the same: *The Journal of Chemical Physics* was the most highly cited journal in Atomic, Molecular, and Chemical Physics; *Review of Scientific Instruments* was the most highly cited in Instruments & Instrumentation; *Physics of Plasmas* was the most highly cited journal dedicated entirely to plasma physics; and *Physics of Fluids* was the second most highly cited in Mechanics. As this theme repeats itself, one thing becomes clear—a large number of researchers across a broad range of disciplines rely on AIP journals to support and enhance their own research activities.

For many years, we have worked with the library community to maintain low prices and low annual

price increases. As a result, AIP's price-to-content value is among the very best in STM publishing. This year, we have made every effort to continue this trend, with subscription prices to AIP journals increasing less than 3% on average.

With outstanding value a time-tested hallmark of AIP journals, we're pleased to also announce that beginning with the 2011 subscription year, AIP will extend backfile access back to 1999 for regular subscriptions to its eight archival journals. AIP's new access policy reinforces our commitment to provide subscribers with the greatest possible value and moves us closer to our goal of disseminating our content more broadly.



This change means that we are eliminating the rolling backfile and that in 2011 our base subscription products will include access to more than twice as much online content. With the elimination of the rolling backfile, the content included in our base subscription product will grow each year. Libraries may still add the extended backfile option to their subscription for a small fee. This will allow their patrons to access content published prior to 1999.

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AIP PROVIDES ONGOING ONLINE ACCESS AND A DEEPER BACKFILE

From the moment that AIP first introduced an e-only subscription option, it has recognized that subscribers should have the right to own the content they pay for, just as they did with print. For customers who requested it, AIP has provided such archival content by delivering PDF files on CD-ROMs.

We are pleased to announce a new policy giving subscribers better access to AIP journal archives. Beginning January 2011, the following changes will apply:

- All current subscriptions will include access back to 1999, the year AIP first offered e-only subscriptions. (We currently

provide a five-year backfile with each subscription.)

- Subscribers will continue to have online access to any previously subscribed material from 1999 forward.

Continued online access to previously subscribed material will be free of charge to any customer who maintains a current, active subscription to any AIP journal. Best of all, current subscribers need do nothing to activate this access – your account will automatically be updated to include these prior subscription years, and you will be notified by email when your access is established.

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AIP ONE OF FOUR ORGANIZATIONS TO ENDORSE KBART PHASE I RECOMMENDED PRACTICE

Set up OpenURL on Scitation to facilitate timely exchange of metadata



We've recently made the titles hosted on our Scitation online platform compliant with the new KBART (Knowledge Bases and Related Tools) recommended practices for the supply of metadata. KBART is a joint initiative of UKSG and NISO, which is exploring data problems within the OpenURL supply chain. AIP's Julie Zhu has joined the KBART II Working Group, and has been tasked with extending KBART to include conference proceedings and eBooks.

A list of Scitation titles is available to both knowledge base suppliers and libraries at http://librarians.scitation.org/librarians/help_files.jsp. AIP is committed to adhering to best practices, which make our content more discoverable to your users.

To set up your OpenURL link resolver on Scitation, you need to register your OpenURL link and icon at http://librarians.scitation.org/librarians/account/openurl_form.jsp. You will need your Scitation Library Service Center username and password (the same that you use for accessing usage reports) in order to access the OpenURL registration form.

Once the set-up is complete, your OpenURL links will be displayed near the links to full text on the tables of contents, abstract, and search result pages. You will see either the text string or graphical image you supplied when completing the set-up form. When users click these links, they will be taken to your OpenURL resolver.

AIP ENHANCES VALUE OF JOURNAL SUBSCRIPTIONS

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Choose any metric you like—the additional backfile content provides added value in a real and tangible way. The chart below, showing our per-article cost for this year, and the projected per-article cost for 2011, will give you an idea of the impact the added content will have.

	2010 Avg. Price/Article	2011 Avg. Price/Article	2011 Avg. Price Decrease
APL	\$0.13	\$0.08	39.8%
Chaos	\$0.77	\$0.46	40.5%
JAP	\$0.24	\$0.13	45.8%
JCP	\$0.48	\$0.23	51.5%
JMP	\$1.34	\$0.67	49.8%
PoF	\$1.01	\$0.55	45.2%
PoP	\$0.73	\$0.39	46.4%
RSI	\$0.47	\$0.22	53.2%

In essence, the value (judged by cost per article) of all our journal subscriptions, in all tiers, has increased by 46% with the addition of the deeper backfile. While of course the price per article won't drop this precipitously every year, each year will see a decrease, thanks to the additional content that will be rolled in. In the last 10 years alone, AIP journal content has grown by more than 60%. As this trend inevitably continues, the value of your subscription will grow along with it.

At AIP, we remain mindful of our responsibilities as a not-for-profit publisher and of our mandate to diffuse the knowledge of physics as broadly as possible. Our new policy regarding backfile access, and the low subscription price increases in 2011 speaks directly to this mandate as we strive to put our content onto the desktops of every physical scientist on the planet.

SUBSCRIBE TO AIP LIBRARY MATTERS

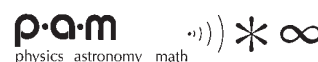
<http://librarians.aip.org/newsletter.html>

WE'RE HAPPY TO PROVIDE CONTINUED SUPPORT TO SLA'S PAM DIVISION

AIP is once again delighted to support activities of the PAM Division at the SLA Annual Conference. We hope to see you at some of the events we sponsor, which this year include the PAM Open House on Monday, June 14, 7:00 – 10:30 PM in the Gallery Ballroom at the Sheraton New Orleans, and the PAM-Wide Roundtable on Monday, June 14, 2:00 – 3:30 PM in Room 215 at the Ernest N. Morial Convention Center.

Please be sure to stop by our booth, #1015, to learn all about our new offerings and to enter a drawing for an iPod touch! To enter the drawing, we ask that you complete a very brief survey on electronic resources.

We look forward to seeing you!



AIP SPONSORS "TWITTER FOR SPECIAL LIBRARIES" WEBINAR

On Wednesday, May 12, AIP sponsored SLA's Sci-Tech Division's webinar "Twitter for Special Libraries." Joe Murphy shared his insights on using twitter to communicate with library clients, and answered questions from the audience in a lively Q&A session.

You can view a recording of the webinar on the Sci-Tech Division's website at <http://units.sla.org/division/dst/>.



From the Stacks: Bob Michaelson

Bob Michaelson

Bob Michaelson recently announced that he is retiring as Head of the Seeley G. Mudd Library for Science and Engineering at Northwestern University on June 30, where he has worked for the past 30 years. Before that, he worked as a library professional at Yale and Syracuse University. Bob has been a vocal critic of commercial publishers' journal pricing practices. We wanted to speak with Bob about his reflections on the state of the library profession and what he thinks the future has in store.

What are some of the changes you've witnessed during your career, and where do you see librarianship (and journal publishing) moving in the future?

When I arrived at Northwestern, it was renowned for having developed NOTIS, a mainframe-based Library Management System that included circulation and parts of technical processing, though not yet an online catalog in 1980. There were no online journals at all; there was computer-to-computer communication in research laboratories, particularly those funded by the Department of Defense, via TCP/IP, but there wasn't an Internet as such. Standard Internet protocols were only implemented in 1982, and even email didn't exist in libraries. We did online database searching via telephone modem connection from dumb terminals at 300 baud! A few years later we started to get electronic databases on CD-ROM – the impact of Science Citation Index (1985) and other CD databases was

enormous at the time, though utterly overshadowed by the later impact of web-based access. Not to belabor the point, it was a completely different world; I certainly didn't imagine libraries of today, and I don't know that anyone else did either.

Thus, if the empirical relation known as Moore's Law continues to hold, it would be presumptuous of me to predict what librarianship and scholarly communication will be like in even a few years. I hope though that we can take better advantage of the online environment to reduce costs and to make research results available to everyone, wherever they are – and to facilitate worldwide collaboration in research projects. It does seem certain that printed journals and conference proceedings will completely disappear quite soon. Libraries are less warehouses of print – though that will always be one of our functions – and increasingly places for students to collaborate on research projects; thus librarians need to become more adept at facilitating the latter.

As an outspoken critic of the Big Deals, what do you think the future is for these types of subscription bundles?

My concern with these subscription bundles is that they take control away from libraries and vest it in the publishers, who then have little or no motivation to rein in costs or maintain quality. It is possible that the current financial crisis, which doesn't seem likely to abate very soon, will force libraries to take back control, which would be a very good thing. But perhaps that is wishful thinking.

Have consortia deals played a big role in Northwestern's own acquisitions?

Certainly Northwestern participates in many consortia deals, especially within the CIC. Unfortunately these deals tend to be top-down: a publisher approaches the CIC which then suggests deals to the Collection Development Officers of CIC institutions, and front-line librarians are consulted only at the

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BMF LAUNCHES NEW SECTION: FABRICATION AND LABORATORY METHODS

With the goal of providing a strong reference point for researchers interested in developing lab-on-a-chip and related technologies, *Biomicrofluidics* (bmf.aip.org) has launched a new section called "Fabrication and Laboratory Methods." The new section is a collection of published "recipes" on novel and classic techniques of laboratory methods and micro-/nanofabrication procedures and is quite unique to the community.

We believe making such procedures freely available will help in the promotion and acceleration of microfluidic and nanofluidic research. We're also convinced that the articles appearing in this section, which carry a journal citation in their own right, will make the research directly relevant to researchers in other disciplines and to industry practitioners, as well.

Developed specifically for articles in this new section, and now available throughout the journal, is a valuable new discovery tool that lets researchers view embedded multimedia. Rather than opening in a separate window, video files can now be opened right

in the HTML version of the article. This allows researchers to read the figure caption while watching the video. It also makes replicating experiments easier than simply working from written findings.

While multimedia has been a central part of our published papers since the journal's launch, we are constantly seeking ways to enhance the use of multimedia, both as a research and a pedagogical tool.

Moreover, with the increasing number of graduate and even undergraduate courses in microfluidics and nanofluidics, we feel these innovative and informative video tutorials, now embedded in the full-text articles, represent a tremendous resource.

METHOD top

Although there are many methods for fabricating structures in PDMS, we focus on the most common approach here and the reader to refer to other works^{18,19} for special needs. The process outlined here and in Fig. 1 presumes the work is conducted in a clean environment; the use of a clean room is not absolutely necessary except for the most demanding requirements. However, avoiding surface contamination is essential. Please note with subsequent reuse using de-ionized water for cleaning tools and substrates.

Fig. 1.

Process of making microfluidic devices with PDMS. (Enhanced online) [URL: <http://dx.doi.org/10.1063/1.3059241>]

View first occurrence of Fig. 1 in article.

PDMS top

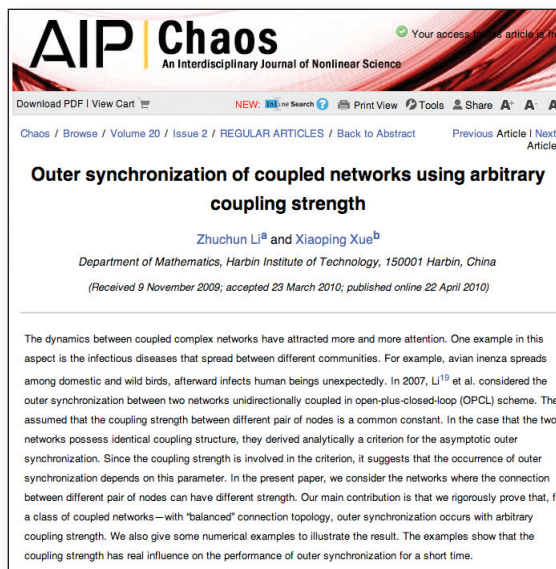
The classic choice of PDMS for microfluidics is Dow and Corning's Sylgard 184, a two-part system with mix ratio of one (crosslinker) part A: silicone B = 1:10. Increasing the cross-linker ratio in the mix is known to increase the rigidity of the product,¹⁸ and some changes to the cure cycle can be performed to alter the PDMS' mechanical properties. Further, other materials can alter the mechanical properties of the PDMS (Ref. 11) or offer novel features not possible with standard Sylgard. Coating with other media gives similarly broad possibilities.¹⁷

Upon mixing, the PDMS must be degassed in a vacuum chamber for best results, and an Erlenmeyer flask or large beaker is recommended to avoid a mess from the typically vibrant looking off of the pan from the PDMS. The PDMS can

CHAOS LEAD PARAGRAPHS MAKE JOURNAL ACCESSIBLE TO SPECIALISTS AND NON-SPECIALISTS ALIKE

Chaos publishes the highest quality research from around the world on the latest developments in nonlinear science. The excitement and challenge of the journal lie in its interdisciplinary character and its firm commitment to communicating the most recent theoretical and experimental developments to the scientific community at large in language that's accessible to the broadest possible audience.

Because nonlinear science is inherently interdisciplinary, impacting diverse disciplines that encompass the physical and biological sciences, mathematics,



engineering, and many of the social sciences—notably economics and demographics—article authors submit a “lead paragraph” written to the non-specialist. This paragraph provides a sense of the context of the work and conveys the primary results, but in language that is accessible to the journal's diverse audience.

Importantly, approximately every other issue of *Chaos* is a special “Focus” issue. These special issues, which offer a critical introduction and overview of a particular topic, are suitable to non-specialists, as well as to established researchers in the area.

AIP NOW PROVIDES ONGOING ONLINE ACCESS AND A DEEPER BACKFILE

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This policy brings with it changes to the scope of current AIP journal subscriptions. Journal subscriptions will no longer have a “rolling archive.” All subscribers will have online access to content back to 1999 and, for lapsed titles, access to any year of content for which they held a paid subscription. (*Chaos* subscribers will continue to have access back to 1991.) And all subscribers will continue to have the option to subscribe to the complete pre-1998 archive of any title back to Volume 1, No. 1.

“AIP has long recognized the subscriber’s right to unfettered access to content for which they’ve paid,” says Mark Cassar, AIP Publisher of Journals and Technical Publications. “Ownership is great, but it’s largely meaningless if the user does not have online access to the ‘owned’ material. Our new policy marries ‘ownership’ and ‘access’ to better serve our subscribers’ and our users’ needs.”

The new backfile policy for AIP journals – which provides access back to 1999 for each title – also applies to the *Journal of Physical and Chemical Reference Data*, co-published with NIST. *Low Temperature Physics*, an AIP Russian translation journal, provides access back to 1997. AIP Conference Proceedings include a complete archive back to 1970. *Physics Today* will continue to offer current subscribers a five-year backfile or a 63-year backfile, and the opportunity to purchase the *Physics Today* Digital Archive for a one-time payment. *Journal of Renewable and Sustainable Energy* and *Biomechanics* remain free.

FROM THE STACKS

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end of the process when there is a decision deadline; we may not be able to provide informed feedback in a timely fashion. This sometimes results in less than optimal allocation of our resources.

You are a prominent contributor to PAMnet and have been a steady presence at SLA meetings. Are meetings like this still valuable for librarians, or are they less necessary with all the other social media outlets you have?

I've been pleasantly surprised to receive email messages about my retirement from people I've never even met – it is immensely gratifying to find that some of my postings on PAMnet have been useful to people, without face to face contact. Certainly other online tools will enhance this sort of impact even more, save money, allow contact when one is unable to attend meetings, and be better for the environment than air travel. But I think, and hope, that SLA meetings will continue; nothing can replace the pleasure of meeting colleagues, whether old friends or new acquaintances, in person.

SEE US AT THESE UPCOMING EVENTS

CONFERENCE	LOCATION	DATES
ACS National Exposition	Boston	22 – 26 Aug
Frankfurt Book Fair	Frankfurt	6 – 10 Oct
AVS Annual Symposium	Albuquerque	17 – 22 Oct
Charleston Conference	Charleston	3 – 6 Nov
MRS Fall Meeting	Boston	30 Nov – 2 Dec
Online Information 2010	London	30 Nov – 2 Dec