

Editorial Board

Chair

P. R. Shepherd • Auckland

Vice Chair, The Americas

G. Salvesen • La Jolla, CA

Vice Chair, Asia-Pacific

T. Xu • Beijing

Vice Chair, Europe

D. R. Alessi • Dundee

Vice Chair Reviews

A. Toker • Boston, MA

Deputy Chairs

M. Blatt • Glasgow**L. J. Goodyear** • Boston, MA**S. V. Graham** • Glasgow**D. Hoekstra** • Groningen**S. Huber** • Urbana, IL**J. E. Ladbury** • Houston, TX**M. A. Lemmon** • Philadelphia, PA**C. MacKintosh** • Dundee**M. Murphy** • Cambridge**S. Roberts** • Buffalo, NY**M. A. Schwartz** • Charlottesville, VA**D. Tosh** • Bath**D. M. F. van Aalten** • Dundee**B. Vanhaesebroeck** • London**H. M. Wallace** • Aberdeen**M. F. White** • St Andrews

Publisher

P. J. Starley

Executive Editor

M. R. Thorne

Production Manager

M. D. Cunningham

Staff Editors

M. Banerjee**C. L. Curtis****E. A. G. Elloway****J. W. Mockridge****H. F. Roberts**

Administrative Editor, US Office

S. Schendel

- S. Akira (Osaka)
 J. Ariño (Barcelona)
 T. K. Attwood (Manchester)
 J. M. Backer (Bronx, NY)
 B. M. Baker (Notre Dame, IN)
 J. E. Bear (Chapel Hill, NC)
 J. L. Blank (Cambridge, MA)
 M. A. Bogoyevitch (Melbourne, VIC)
 L. H. Boise (Atlanta, GA)
 J. Bolaños (Salamanca)
 P. J. Booth (Bristol)
 L. Boscá (Madrid)
 N. J. Buckley (London)
 J. F. Cáceres (Edinburgh)
 D. Carling (London)
 M. Cascante (Barcelona)
 Y.-G. Chen (Beijing)
 L. Chernomordik (Bethesda, MD)
 A. C. Clark (Raleigh, NC)
 V. Darley-Usoñar (Birmingham, AL)
 M. J. Davies (Sydney)
 B. Davis (Oxford)
 L. A. Devi (New York, NY)
 I. Dikic (Frankfurt)
 R. Docampo (Athens, GA)
 D. Doyle (Dublin)
 C. S. Duckett (Ann Arbor, MI)
 A. F. Dulhunty (Canberra)
 P. Fay (Rochester, NY)
 R. Ferraris (Newark, NJ)
 S. Flitsch (Manchester)
 P. G. W. Gettins (Chicago, IL)
 R. Golsteyn (Lethbridge, AB)
 B. Halliwell (Singapore)
 I. B. Holland (Orsay)
 J. M. Horowitz (Raleigh, NC)
 E. Ikonen (Helsinki)
 A. Imberty (Grenoble)
 D. A. Jans (Monash)
 P.-S. Jayaraman (Birmingham)
 D. Jordan (Peoria, IL)
 M. G. Kazanietz (Philadelphia, PA)
 Z. Knight (New York)
 D. Komander (Cambridge)
 D. W. Laird (London, Ont.)
 J. H. Lakey (Newcastle upon Tyne)
 K. Lingelbach (Marburg)
 D. W. Litchfield (London, Ont.)
 P. S. Lorenzo (Honolulu, HI)
 B. Luisi (Cambridge)
 E. Manser (Singapore)
 M. McManus (Palmerston North)
 J. Miernyk (Columbia, MO)
 E. T. Morgan (Atlanta, GA)
 I. Morgan (Glasgow)
 A. J. Morris (Lexington, KY)
 M. Muckenthaler (Heidelberg)
 B. Mulloy (South Mimms)
 A. W. Munro (Manchester)
 G. Murphy (Cambridge)
 H. Y. Naim (Hannover)
 J. Naismith (St Andrews)
 W. Ogawa (Kobe)
 G. Panayotou (Vari)
 S. Patel (London)
 G. Pavitt (Manchester)
 N. D. Perkins (Newcastle)
 L. Persson (Lund)
 P. F. Pilch (Boston, MA)
 W. C. Plaxton (Kingston, Ont.)
 S. Ponnambalam (Leeds)
 R. Y. Poon (Hong Kong)
 B. Potter (Bath)
 Z. Radić (La Jolla, CA)

- Journal compilation © 2010 Biochemical Society
- The *Biochemical Journal* (ISSN 0264-6021 for print/online journal; ISSN 1470-8728 for online only journal) is published and distributed by Portland Press Limited on behalf of the Biochemical Society (the owner), and appears twice monthly (24 issues).
- **Editorial and publishing offices:** *Biochemical Journal*, Portland Press Limited, Third Floor, Charles Darwin House, 12 Roger Street, London WC1N 2JL, U.K.
- **US agent:** c/o Mercury International, 365 Blair Road, Avenel, NJ 07001, U.S.A.
- **Subscriptions department:** Portland Customer Services, P.O. Box 32, Commerce Way, Colchester CO2 8HP, U.K.
- All rights reserved. Apart from any fair dealing for the purposes of research or private study, or criticism or review, as permitted under the Copyright, Designs and Patents Act, 1988, this publication may be reproduced, stored or transmitted, in any forms or by any means, only with the prior permission in writing of the publishers, or in the case of reprographic reproduction in accordance with the terms of permissions granted by copyright clearing houses such as the Copyright Licensing Agency (U.K.) or the Copyright Clearance Center (U.S.A.). The CCC item-fee code for this publication is 0264-6021/2010/\$50.00 + 0.00. Inquiries concerning reproduction outside those terms should be sent to the publishers at the above-mentioned address.
- Although, at the time of going to press, the information contained in this publication is believed to be correct, neither the authors nor the editors nor the publisher assume any responsibility for any errors or omissions herein contained. Opinions expressed in articles are not necessarily those of the editors, the publisher or the owner.
- Periodicals postage paid at Rahway, NJ, U.S.A.
- **Postmaster:** send address corrections to *Biochemical Journal*, c/o Mercury International, 365 Blair Road, Avenel, NJ 07001, U.S.A.
- **Cover design:** Angie Moyes (www.fuz.co.uk).
- **Cover image credits:** Sharon M. Stack, University of Missouri; Carmen A. Mannella, Research and Technology Wadsworth Center, Albany, NY; Nottingham *Arabidopsis* Stock Centre (NASC); G. P. Côté, Kingston, Ont.; G. Salvesen, La Jolla; Dr Gordon Beahes, Newcastle University.

Instructions to Authors

● General policy The *Biochemical Journal* publishes papers in English in all fields of biochemistry and cellular and molecular biology, provided that they make a sufficient contribution to knowledge in these fields. Papers may include new results obtained experimentally, descriptions of new experimental methods of biochemical importance, or new interpretations of existing results. Novel theoretical contributions will be considered, although these papers should also contain some experimental testing of the theory. All work presented should have as its aim the development of biochemical concepts rather than the mere recording of facts. Preliminary, confirmatory or inconclusive work will not be published. The *Biochemical Journal* will not publish material that has been wholly or largely published elsewhere, even as a preliminary communication or in unrefereed symposium proceedings or on the World Wide Web (WWW); equally, fragmentation of research into the 'least publishable unit' is discouraged.

Submission of a paper implies that it has been approved by all the named authors, that all persons entitled to authorship have been so named, that it reports unpublished work that is not under consideration elsewhere, and that if the paper is accepted for publication the authors will transfer to the Biochemical Society the copyright in the paper, which will then not be published elsewhere in the same form, in any language, without the consent of the Society. Authors will be required to sign an undertaking to these effects.

Authors may suggest potential reviewers for their papers, but the journal is under no obligation to follow such suggestions. Authors may also specify the names of those they wish to be excluded from the review process, and such wishes are usually respected unless, in the opinion of the journal, such a request unreasonably excludes all the expertise available to it in that scientific area.

To allow the reviewers to assess possible overlap with previous work, all submitted papers must be accompanied by duplicate copies of the author's relevant published work, including that on the WWW, and of all related papers in press or under editorial consideration in this or other journals.

The following types of paper are included in the journal.

Research Papers are the normal form of publication, and may be of any length that is justified by their content. However, because of pressure for space in the journal, no paper, whatever its scientific merits, will be accepted if it exceeds the minimum length required for

precision in describing the experiments and clarity in interpreting them. As a guide, most Research Papers published in the *Biochemical Journal* are of between six and eight printed pages. A concise well-written paper tends to be published more rapidly.

Accelerated Publications (APs) are short (normally four printed pages) papers bringing particularly novel and significant findings to the attention of the research community. It is intended that a decision on acceptance or rejection will be made within 10 working days of receipt, and publication of accepted APs in an issue will follow within 2 months. APs receive full but accelerated reviewing. The criteria of 'novelty and significance' are strictly enforced, and papers may be rejected solely on the grounds of lack of novelty and significance. APs are not a path to accelerated publication of sound but non-urgent material. Authors must include in their letter of submission a brief statement of why they believe their AP merits accelerated treatment. Colour figures will be published free of charge in APs, provided the use of colour is deemed scientifically necessary by the reviewers.

Reviews will usually be solicited, although unsolicited reviews will be considered for publication. Prospective writers of reviews should first consult the Reviews Editor, via the editorial office, and should enclose a short (one page) summary of the area they propose to cover.

● Procedure for submission These instructions do not replace the official *Biochemical Journal* Instructions to Authors (<http://www.BiochemJ.org>). Authors are encouraged to refer to these for overall guidelines on submitting a paper. Before preparing papers for the journal, authors should consult a current issue to make themselves familiar with the general format, such as the use of cross-headings, layout of tables and figures and citation of references. A full page of text in the *Biochemical Journal* contains approximately 1200 words; when calculating the printed length of papers, allowance must be made for the space occupied by tables and figures and the number of text words distributed accordingly.

The numerical system of references must be used. A reference to 'unpublished work' must be accompanied by the names of all persons concerned: a reference to a 'personal communication' must be supported by written permission for the quotation from the person or persons concerned; both of these types of citation are permitted in the text only, not in the list of references.

● Submit manuscripts online Authors should submit manuscripts electronically using the Online Submission and Review System available at <http://www.BiochemJ.org/submit/>

● Immediate Publications Manuscripts are published online in PDF format as soon as they are accepted, unless on submission the author requests that this not be done. Immediate Publications are listed in and accessible through Medline, and are freely available to anyone with Internet access.

● Opt2Pay Choose to make your paper freely available. For more information see www.biochemJ.org.

● Queries and correspondence Authors in the Americas should address all queries and correspondence about their submission to: Dr Sharon Schendel, BJ USA, The Sanford-Burnham Institute for Medical Research, 10901 N. Torrey Pines Road, La Jolla, CA 92037, U.S.A. (telephone +1 858 795 5283; fax +1 858 795 5284; email editorial@biochemjusa.org). Authors in the U.K., the rest of Europe, Japan and the rest of the world should contact: The Publisher, *Biochemical Journal*, Portland Press Limited, Third Floor, Charles Darwin House, 12 Roger Street, London WC1N 2JL, U.K. (telephone +44 20 7685 2410; fax +44 20 7685 2469; email editorial@portlandpress.com).

● Colour figures Colour figures are published free of charge provided that the corresponding author on the published paper has been a member of the Biochemical Society for at least 2 years and that the use of colour is deemed scientifically necessary by the reviewers. Otherwise the charges are £550 for the first colour figure and £300 for each subsequent colour figure.

● Multimedia adjuncts The *Biochemical Journal* Online offers authors the opportunity to enhance their papers with multimedia adjuncts (e.g. time-lapse movies, three-dimensional structures, animated schemes). These will be submitted to peer review alongside the manuscript. To submit a paper with a multimedia adjunct, please attach the file when you submit your manuscript electronically. Preferred formats are QuickTime for time-lapse movies, PDB for structures and Flash for animated schemes. There is no extra charge associated with the publication of a multimedia adjunct online.

● COPE The *Biochemical Journal* is a member of the Committee on Publication Ethics and endorses its guidelines, which are available at <http://publicationethics.org.uk>

Other information

The *Biochemical Journal* is published and distributed by Portland Press Limited on behalf of the Biochemical Society. It is published twice monthly; in 2011 volumes 433–440 (three parts each) will appear. The subscription also includes an author and key-word index.

● Abstracted by/indexed in: BIOBASE, BIOSIS, CAB International, Chemical Abstracts Service, Current Contents, EMBASE, International Food Information Service, Medline/Index Medicus, Proquest Information & Learning, Science Citation Index.

● Subscription rates Institutional subscription rates for 2011 are shown below. Subscribers to the *Biochemical Journal* can subscribe additionally to *Biochemical Society Transactions* on a joint subscription at a reduced rate (see www.portlandpress.com for further details). Terms are cash with order (US\$ in N. America, £ sterling for rest of the world, or US\$ equivalent at current rate of exchange; subscribers in the EU may pay in £ sterling or Euros), or against pro forma invoice. Orders should be sent to the address

shown, to your usual agent or purchased online at www.portlandpress.com.

	N. One year (8 vols) Print and online	America Online only	Rest of world £2373 £2136	Euro price €3812 €3430
Single issues (print only)		US\$235	£119	€202

Overseas rates include airfreight delivery. Airspeeded delivery is available at an additional cost of £80/€101.

Value Added Tax (VAT) on online-only and 'combined' subscriptions is due on supplies to subscribers within the UK, and to non-registered subscribers elsewhere in the EU. If in the EU please state your VAT number otherwise VAT may be charged at the appropriate national rate.

● Electronic back archive This is freely available to all users with Internet access.

● Microfiche and back issues Volumes 102–408 of the *Biochemical Journal* are available

on microfiche. Back issues are also available. Further details may be obtained from the address below.

● Subscription Department

Portland Customer Services
P.O. Box 32, Commerce Way
Colchester CO2 8HP, Essex, U.K.
(telephone 01206 796351; fax 01206 799331;
email sales@portland-services.com).

● Advertising Enquiries about advertising should be addressed to: Mark Burgess, Editorial Department, Portland Press Limited Third Floor, Charles Darwin House, 12 Roger Street, London WC1N 2JL, U.K.; tel.: +44 (0)20 7685 2410; fax: +44 (0)20 7685 2469; email: editorial@portlandpress.com

● The paper and cover-boards used in this journal are sourced from sustainable, managed and renewed commercial forests, and are fully recyclable. The bleaching process used for the pulp is 100% ECF (elemental chlorine free).

Research Papers

Mycobacterium tuberculosis WhiB1 is an essential DNA-binding protein with a nitric oxide-sensitive iron–sulfur cluster

Published as BJ Immediate Publication 8 October 2010,

doi:10.1042/BJ20101440

In vivo evidence for the iron-binding activity of an iron–sulfur cluster assembly protein IscA in *Escherichia coli*

Published as BJ Immediate Publication 13 October 2010,

doi:10.1042/BJ20101507

A hierarchical classification of polysaccharide lyases for glycogenomics

Published as BJ Immediate Publication 7 October 2010,

doi:10.1042/BJ20101185

Structural insights into the catalytic mechanism of the yeast pyridoxal 5-phosphate synthase Snz1

Published as BJ Immediate Publication 5 October 2010,

doi:10.1042/BJ20101241

Identification of novel species-selective agonists of the G-protein-coupled receptor GPR35 that promote recruitment of β -arrestin-2 and activate $G_{\alpha 13}$

Published as BJ Immediate Publication 5 October 2010,

doi:10.1042/BJ20101287

Functional complexes between YAP2 and ZO-2 are PDZ domain-dependent, and regulate YAP2 nuclear localization and signalling

Published as BJ Immediate Publication 24 September 2010,

doi:10.1042/BJ20100870

PPAR γ co-activator-1 α co-activates steroidogenic factor 1 to stimulate the synthesis of luteinizing hormone and aldosterone

Published on the Internet 25 November 2010,

doi:10.1042/BJ20100460

Kinetics of electron transfer between NADPH-cytochrome P450 reductase and cytochrome P450 3A4

Published as BJ Immediate Publication 29 September 2010,

doi:10.1042/BJ20100744

Three factors that modulate the activity of class D β -lactamases and interfere with the post-translational carboxylation of Lys⁷⁰

Published on the Internet 25 November 2010,

doi:10.1042/BJ20101122

Characterization of the xenobiotic response of *Caenorhabditis elegans* to the anthelmintic drug albendazole and the identification of novel drug glucoside metabolites

Published as BJ Immediate Publication 8 October 2010,

doi:10.1042/BJ20101346

Translocation of the Na⁺/H⁺ exchanger 1 (NHE1) in cardiomyocyte responses to insulin and energy-status signalling

Published as BJ Immediate Publication 24 September 2010,

doi:10.1042/BJ20100717

L.J. Smith, M.R. Stapleton, G.J.M. Fullstone, J.C. Crack,
A.J. Thomson, N.E. Le Brun, D.M. Hunt, E. Harvey,
S. Adinolfi, R.S. Buxton and J. Green

417–427

W. Wang, H. Huang, G. Tan, F. Si, M. Liu, A.P. Landry,
J. Lu and H. Ding

429–436

V. Lombard, T. Bernard, C. Rancurel, H. Brumer,
P.M. Coutinho and B. Henrissat

437–444

X. Zhang, Y.-B. Teng, J.-P. Liu, Y.-X. He, K. Zhou, Y. Chen
and C.-Z. Zhou

445–450



L. Jenkins, J. Brea, N.J. Smith, B.D. Hudson, G. Reilly,
N.J. Bryant, M. Castro, M.-I. Loza and G. Milligan

451–459

T. Oka, E. Remue, K. Meerschaert, B. Vanloo,
C. Boucherie, D. Gfeller, G.D. Bader, S.S. Sidhu,
J. Vandekerckhove, J. Gettemans and M. Sudol

461–472



L. Zhu, Y. Ke, D. Shao, Y. Cui, A. Qiao, X. Liu, F. Fang
and Y. Chang

473–483



Y. Farooq and G.C.K. Roberts

485–493



L. Vercheval, C. Bauvois, A. di Paolo, F. Borel,
J.-L. Ferrer, E. Sauvage, A. Matagne, J.-M. Frère,
P. Charlier, M. Galleni and F. Kerff

495–504



S.T. Laing, A. Ivens, R. Laing, S. Ravikumar, V. Butler,
D.J. Woods and J.S. Gilleard

505–514



S.P. Lawrence, G.D. Holman and F. Koumanov

515–523



Contents

Decoding the intrinsic mechanism that prohibits ALIX interaction with ESCRT and viral proteins
Published as BJ Immediate Publication 8 October 2010,
doi:10.1042/BJ20100862

Human platelets express and are activated by galectin-8
Published as BJ Immediate Publication 21 September 2010,
doi:10.1042/BJ20100538

PP2B/calcineurin-mediated desensitization of TRPV1 does not require AKAP150
Published as BJ Immediate Publication 30 September 2010,
doi:10.1042/BJ20100936

Differentiation of propeptide residues regulating the compartmentalization, maturation and activity of the broad-range phospholipase C of *Listeria monocytogenes*
Published as BJ Immediate Publication 29 September 2010,
doi:10.1042/BJ20100557

The organophosphate-degrading enzyme from *Agrobacterium radiobacter* displays mechanistic flexibility for catalysis
Published as BJ Immediate Publication 24 September 2010,
doi:10.1042/BJ20101054

Erythro-9-(2-hydroxy-3-nonyl)adenine (EHNA) blocks differentiation and maintains the expression of pluripotency markers in human embryonic stem cells
Published as BJ Immediate Publication 5 October 2010,
doi:10.1042/BJ20100726

The immunoproteasome, the 20S proteasome and the PA28 $\alpha\beta$ proteasome regulator are oxidative-stress-adaptive proteolytic complexes
Published as BJ Immediate Publication 5 October 2010,
doi:10.1042/BJ20100878

Lack of DNA helicase Pif1 disrupts zinc and iron homeostasis in yeast
Published as BJ Immediate Publication 21 September 2010,
doi:10.1042/BJ20101032

X. Zhou, J. Si, J. Corvera, G.E. Gallick and J. Kuang



525–534

M.A. Romaniuk, M.V. Tribulatti, V. Cattaneo, M.J. Lapponi, F.C. Molinas, O. Campetella and M. Schattner

535–547

E.D. Por, B.K. Samelson, S. Belugin, A.N. Akopian, J.D. Scott and N.A. Jeske

549–556

E.R. Slepkov, A. Pavinski Bitar and H. Marquis



557–563

F. Ely, K.S. Hadler, L.R. Gahan, L.W. Guddat, D.L. Ollis and G. Schenk

565–573

P. Burton, D.R. Adams, A. Abraham, R.W. Allcock, Z. Jiang, A. McCahill, J. Gilmour, J. McAbney, A. Kaupisch, N.M. Kane, G.S. Baillie, A.H. Baker, G. Milligan, M.D. Houslay and J.C. Mountford



575–584

A.M. Pickering, A.L. Koop, C.Y. Teoh, G. Ermak, T. Grune and K.J.A. Davies



585–594

M. Guirola, L. Barreto, A. Pagani, M. Romagosa, A. Casamayor, S. Atrian and J. Ariño



595–605

Index of Authors

PAGE		PAGE		PAGE		PAGE	
Abraham, A.	575	Ely, F.	565	Kerff, F.	495	Reilly, G.	451
Adams, D. R.	575	Ermak, G.	585	Koop, A. L.	585	Remue, E.	461
Adinolfi, S.	417			Koumanov, F.	515	Roberts, G. C. K.	485
Akopian, A. N.	549	Fang, F.	473	Kuang, J.	525	Romagosa, M.	595
Allcock, R. W.	575	Farooq, Y.	485	Laing, R.	505	Romanuk, M. A.	535
Ariño, J.	595	Ferrer, J.-L.	495	Laing, S. T.	505	Samelson, B. K.	549
Atrian, S.	595	Frère, J.-M.	495	Landry, A. P.	429	Sauvage, E.	495
		Fullstone, G. J. M.	417	Lapponi, M. J.	535	Schattner, M.	535
Bader, G. D.	461	Gahan, L. R.	565	Lawrence, S. P.	515	Schenk, G.	565
Baillie, G. S.	575	Galleni, M.	495	Le Brun, N. E.	417	Scott, J. D.	549
Baker, A. H.	575	Gallick, G. E.	525	Liu, J.-P.	445	Shao, D.	473
Barreto, L.	595	Gettemans, J.	461	Liu, M.	429	Si, F.	429
Bauvois, C.	495	Gfeller, D.	461	Liu, X.	473	Si, J.	525
Belugin, S.	549	Gilleard, J. S.	505	Lombard, V.	437	Sidhu, S. S.	461
Bernard, T.	437	Gilmour, J.	575	Loza, M. I.	451	Slepkov, E. R.	557
Borel, F.	495	Green, J.	417	Lu, J.	429	Smith, L. J.	417
Boucherie, C.	461	Grune, T.	585	Marquis, H.	557	Smith, N. J.	451
Brea, J.	451	Guddat, L. W.	565	Matagne, A.	495	Stapleton, M. R.	417
Brumer, H.	437	Guirola, M.	595	McAbney, J.	575	Sudol, M.	461
Burton, P.	575	Hadler, K. S.	565	McCahill, A.	575	Tan, G.	429
Butler, V.	505	Harvey, E.	417	Meerschaert, K.	461	Teng, Y.-B.	445
Buxton, R. S.	417	He, Y.-X.	445	Milligan, G.	451, 575	Teoh, C. Y.	585
Campetella, O.	535	Henrissat, B.	437	Molinas, F. C.	535	Thomson, A. J.	417
Casamayor, A.	595	Holman, G. D.	515	Mountford, J. C.	575	Tribulatti, M. V.	535
Castro, M.	451	Houslay, M. D.	575				
Cattaneo, V.	535	Huang, H.	429	Oka, T.	461	Vandekerckhove, J.	461
Chang, Y.	473	Hudson, B. D.	451	Ollis, D. L.	565	Vanloo, B.	461
Charlier, P.	495	Hunt, D. M.	417			Vercheval, L.	495
Chen, Y.	445	Ivens, A.	505	Pagani, A.	595		
Corvera, J.	525			Pavinski Bitar, A.	557		
Coutinho, P. M.	437	Jenkins, L.	451	Pickering, A. M.	585		
Crack, J. C.	417	Jeske, N. A.	549	Por, E. D.	549		
Cui, Y.	473	Jiang, Z.	575				
Davies, K. J. A.	585	Kane, N. M.	575	Qiao, A.	473	Zhang, X.	445
Ding, H.	429	Kaupisch, A.	575	Rancurel, C.	437	Zhou, C.-Z.	445
di Paolo, A.	495	Ke, Y.	473	Ravikumar, S.	505	Zhou, K.	445
						Zhou, X.	525
						Zhu, L.	473

Index of Authors

Volume 432, 2010

PAGE	PAGE	PAGE					
Abe, M.	47	Cui, Y.	473	Houslay, M. D.	21, 575	McLaughlin, N. J. D.	35
Abe, Y.	101	Czerwinska, H.	123	Hsieh, H.-T.	267	McRae, S.	21
Abraham, A.	21, 575	Dai, Y.	199	Huang, H.	429	Meerschaert, K.	461
Adams, D. R.	21, 575	Dalby, P. A.	101	Hudson, B. D.	451	Melo, S. P.	217
Adinolfi, S.	417	Daligault, F.	303	Hunt, D. M.	417	Milligan, G.	21, 451, 575
Agarwal, A.	9	Daniel, K. G.	255	Igarashi, M.	47	Mitsui, K.	343
Aitken, J. F.	113	Darley-Usmar, V.	9	Ikegawa, S.	47	Mohandas, N.	407
Akopian, A. N.	549	Davies, K. J. A.	585	Ivens, A.	505	Molinas, F. C.	535
Albrecht, D.	353	Davies, M. J.	313	Izumikawa, T.	47	Mollov, P. L.	323
Allcock, R. W.	21, 575	Derjuga, A.	145	Jiang, J.	199	Moraes, T. F.	57
Amizuka, N.	47	Di Paolo, A.	495	Jiang, L.	89	Moreno, F.	181
An, X.	407	Dickson, C. F.	275	Jiang, Z.	199	Morgan, P. E.	313
Andrews, P. D.	21	Ding, H.	429	Jin, Y.	199	Morita, S.-y.	387
Anglés-Cano, E.	365	Doeuvre, L.	365	Johnson, M. S.	9	Morris, A. J.	65
Aoyagi, K.	375	Drewes, G.	165	Jenkins, L.	451	Mountford, J. C.	21, 575
Arfili, V.	173	Durgan, J.	77	Jeske, N. A.	549	Murphy, M. P.	9
Ariño, J.	595	Eckels, P.	35	Jiang, J.	199	Nagamatsu, S.	375
Aspégren, A.	21	Edgren, M. R.	295	Jin, Y.	199	Nagy, P.	313
Atrian, S.	595	Ely, F.	565	Johnson, M. S.	9	Nakamichi, Y.	375
Bader, G. D.	461	Emslie, E.	153	Kalyanaraman, B.	9	Natsume, R.	47
Baillie, G. S.	207, 575	Epe, B.	165	Kanazawa, H.	343	Navarro, M. N.	153
Baker, A. H.	575	Ermak, G.	585	Kane, N. M.	575	Netter, P.	303
Balog, E. M.	89	Fang, F.	473	Kaupisch, A.	575	Ng, Y.	191
Banerjee, A.	35	Farooq, Y.	485	Ke, Y.	473	Nishiwaki, C.	375
Barreto, L.	595	Feijoo-Carnero, C.	153	Keilher, M. R.	35	Nunomura, W.	407
Bauvois, C.	495	Fernandes, A. P.	295	Kerff, F.	495	Ohara-Imaizumi, M.	375
Becroft, M.	21	Ferrer, J.-L.	495	Khambati, H. K.	57	Oka, T.	461
Belugin, S.	549	Finck, B. N.	65	Khan, S. Y.	35	Ollis, D. L.	565
Berger, F. G.	217	Frearson, J. A.	21	Kim, H. B.	65	Oosterveer, M. H.	249
Bernejo, C.	399	Frommer, W. B.	399	Kime, R.	21	Pagani, A.	595
Bernard, T.	437	Frère, J.-M.	495	Kinoshita, K.	407	Pagliaro, P.	173
Berndt, C.	295	Fullstone, G. J. M.	417	Kitagawa, H.	47	Palmer, D. R. J.	237
Bird, R. J.	207	Furiuchi, T.	47	Kitagawa, S.	387	Parker, P. J.	77
Bishop, G. M.	123	Fusser, M.	165	Kolokythas, A.	199	Parkin, E. T.	283
Blank, V.	145	Gahan, L. R.	565	Koop, A. L.	585	Parr-Sturgess, C. A.	283
Blume, U.	165	Gaikwad, A. B.	333	Koumanov, F.	515	Parra, M.	407
Borel, F.	495	Galleni, M.	495	Krishna Kumar, K.	275	Patel, P.	89
Borodkin, V. S.	1	Gallick, G. E.	525	Kuang, J.	525	Pavinski Bitar, A.	557
Boucherie, C.	461	Gamboni-Robertson, F.	35	Kuhlow, D.	165	Paw, B. H.	145
Bracewell, D. G.	101	Gascard, P.	407	Kuipers, F.	249	Peláez, R.	181
Branlant, G.	303	Gasiorek, J.	145	Kurz, I.	295	Perkins, S. J.	101
Brea, J.	451	Gell, D. A.	275	Laing, R.	505	Peskin, A. V.	313
Brigotti, M.	173	Gettemans, J.	461	Laing, S. T.	505	Pickering, A. M.	585
Brittain, T.	113	Gfeller, D.	461	Lambert, P. A.	133	Piet, M.-H.	303
Brumer, H.	437	Gilleard, J. S.	505	Lambert, Q. T.	255	Plawinski, L.	365
Brunk, U. T.	295	Gilmour, J.	21, 575	Landry, A. P.	429	Ponka, P.	145
Bryant, N. J.	451	Glatt, H.	165	Lane, D. J. R.	123	Por, E. D.	549
Brüssow, K.-P.	353	Gordon, G. M.	101	Lang, S.	133	Qiao, A.	473
Buchanan, C. M.	113	Goux, D.	255	Lapponi, M. J.	535	Qu, J.	65
Burton, P.	575	Green, J.	365	Lattard, V.	303	Rahuel-Clermont, S.	303
Butler, V.	505	Grefhorst, A.	417	Lawen, A.	123	Rancurel, C.	437
Buxton, R. S.	417	Groen, A. K.	249	Lawrence, S. P.	515	Ravikumar, S.	505
Competella, O.	535	Grune, T.	249	Le Brun, N. E.	417	Reiche, C.	165
Cantrell, D. A.	153	Guddat, L. W.	585	Li, M.	47	Reijngoud, D.-J.	249
Carmack, A. E.	65	Guerra, S. M.	227	Lin, C.-C.	267	Reilly, G.	451
Carnicelli, D.	173	Guirola, M.	595	Liu, C.-H.	65	Reilly, C.	9
Carrière, L.	145	Gulberti, S.	303	Liu, J.-P.	445	Reinke, K.	353
Casamayor, A.	595	Gupta, J.	333	Liu, M.	429	Remue, E.	461
Castro, M.	451	Hadler, K. S.	565	Liu, X.	199	Ren, H.	65
Cattaneo, V.	535	Haerizadeh, F.	399	Lombard, V.	437	Reuther, G. W.	255
Chacko, B. K.	9	Hampton, M. B.	313	Loomes, K. M.	113	Ricci, F.	173
Chang, Y.	473	Harris, T. E.	65	Loza, M. I.	451	Ristow, M.	165
Chao, Y.-C.	267	Harvey, E.	417	Lu, J.	429	Roberts, G. C. K.	485
Charlier, P.	495	Hasegawa, A.	47	Mackay, J. P.	275	Robertson, J.	133
Chen, C.	65	Havinga, R.	249	Magdalou, J.	303	Robinson, S. R.	123
Chen, C.-C.	267	He, Y.-X.	445	Mardini, L.	145	Rocchi, L.	173
Chen, Yanyi	89	Heidbreder, C. E.	199	Marquis, H.	557	Romagosa, M.	595
Chen, Yuxing	445	Henrissat, B.	437	Martin, P. E.	133	Romaníuk, M. A.	535
Chen, Z.	199	Herling, A. W.	249	Martin, J. F.	227	Ross, J. P.	323
Cheng, C.-J.	267	Herrero, P.	181	Matagne, A.	495	Rushton, D. J.	283
Chermak, D.	399	Hickey, A.	113	Matsushita, M.	343	Saeki, M.	47
Chien, V.	113	Higa Onaga, S.	47	Matthews, S. A.	153	Sakimura, K.	47
Cooper, G. J. S.	113	Holman, G. D.	515	McAbney, J.	575	Samelson, B. K.	549
Cortés, V. A.	249			McCahill, A.	575		
Corvera, J.	525						
Coutinho, P. M.	437						
Cox, A. G.	313						
Crack, J. C.	417						

Volume Author Index (continued)

	PAGE		PAGE		PAGE		PAGE
Sanders, D. A. R.	237	Smith, L. J.	417	Tikoo, K.	333	Winterbourn, C. C.	313
Sato, M.	47	Smith, N. J.	451	Tomek, W.	353	Wollenhaupt, K.	353
Sauvage, E.	495	Srivastava, A.	9	Tribulatti, M. V.	535	Woods, D. J.	505
Schattner, M.	535	Stapleton, M. R.	417	Tsujita, M.	47		
Schenk, G.	565	Steinberg, P.	165			Yang, J. J.	89
Schimpf, M.	1	Strehl, R.	21			Yang, R.-B.	267
Schranzhofer, M.	145	Sudol, M.	461	Ulasova, E.	9	Yarwood, S. J.	207
Schreurs, M.	249	Suetake, I.	323	Ullán, R. V.	227	Ye, Y.	9
Schryvers, A. B.	57					Yokoyama, M.	47
Schulz, T. J.	165	Tajima, S.	323	Vaca, I.	227	Yoshida, A.	217
Schüttelkopf, A. W.	1	Takakuwa, Y.	407	van Aalten, D. M. F.	1	Yu, R.-n.	57
Scott, J. D.	549	Takanaga, H.	399	van Straaten, K. E.	237		
Selenius, M.	295	Takeuchi, A.	387	Vandekerckhove, J.	461	Zhang, S.	113
Seyfert, H.-M.	353	Takeuchi, K.	47	Vanloo, B.	461	Zhang, X.	445
Shao, D.	473	Tan, G.	429	Vercheval, L.	495	Zheng, H.	237
Shouldice, S. R.	57	Tan, S.-X.	191	Vivien, D.	365	Zhou, C.-Z.	445
Si, F.	429	Tazzari, P. L.	173	Voigt, A.	165	Zhou, K.	445
Si, J.	525	Teijeira, F.	227			Zhou, X.	199
Sidhu, S. S.	461	Teng, Y.-B.	445			Zhou, X.	525
Silliman, C. C.	35	Teoh, C. Y.	585	Wang, A.	199	Zhou, Y.	89
Sinclair, L. V.	153	Thierbach, R.	165	Wang, W.	429	Zhu, L.	473
Singh, J.	57	Thomson, A. J.	417	Watanabe, Y.	47	Zinn, K. R.	9
Slepkov, E. R.	557	Tiemann, U.	353	Weiss, M. J.	275	Zou, J.	89