

Marco Zennaro

Publications

Books

I co-edited with ICTP Associate Bharat Chaudhari the book "LPWAN Technologies for IoT and M2M Applications", ISBN 978-0-12-818880-4, Elsevier, 2020.

I co-edited the book "IoT in Five Days", 2015. The book has been translated in French and Spanish with the support of the Internet Society (ISOC).

I co-edited the book "TV White Spaces, a pragmatic approach" (<http://wireless.ictp.it/tvws/book/>), 2013.

I co-edited the book "m-Science: Sensing, Computing and Dissemination", 2010.

I co-edited the book "Science Dissemination using Open Access" (<http://sdu.ictp.it/openaccess/book.html>), 2008.

I co-edited the book "How To Accelerate Your Internet: A practical guide to Bandwidth Management and Optimisation using Open Source Software", 2006.

I co-authored the book Wireless Networking in the Developing World (<http://www.wndw.net>), 2005. The book has been translated in six languages (French, Spanish, Portuguese, Arabic, Indonesian, Burmese) and has been downloaded more than 3 million times.

Journal Articles

Bharat S Chaudhari, Marco Zennaro, and Suresh Borkar. "LPWAN Technologies: Emerging Application Characteristics, Requirements, and Design Considerations". In: *Future Internet* 12.3 (2020), p. 46.

Sheetal N Ghorpade, Marco Zennaro, and Bharat S Chaudhari. "GWO Model for Optimal Localization of IoT-Enabled Sensor Nodes in Smart Parking Systems". In: *IEEE Transactions on Intelligent Transportation Systems* (2020).

Pape Abdoulaye Barro et al. "A Smart Cities LoRaWAN Network Based on Autonomous Base Stations (BS) for Some Countries with Limited Internet Access". In: *Future Internet* 11.4 (2019), p. 93.

Angelica Moreno Cardenas et al. "A Low-Cost and Low-Power Messaging System Based on the LoRa Wireless Technology". In: *Mobile Networks and Applications* (2019), pp. 1–8.

Sheetal N Ghorpade, Marco Zennaro, and Bharat S Chaudhari. "Binary grey wolf optimisation-based topology control for WSNs". In: *IET Wireless Sensor Systems* 9.6 (2019), pp. 333–339.

Pape Barro et al. "Towards Smart and Sustainable Future Cities Based on Internet of Things for Developing Countries: What Approach for Africa?" In: *EAI Endorsed Transactions on Internet of Things* 4.13 (2018).

Riccardo Gerin et al. "On the design of a sustainable ocean drifter for developing countries". In: *EAI Endorsed Transactions on Internet of Things* 4.13 (2018).

Nikola Jovalekic et al. "Experimental study of LoRa transmission over seawater". In: *Sensors* 18.9 (2018), p. 2853.

Nikola Jovalekic et al. "LoRa transceiver with improved characteristics". In: *IEEE Wireless Communications Letters* 7.6 (2018), pp. 1058–1061.

Marco Zennaro and Santhi Kumaran. "Capacity building initiatives in IoT in developing countries: lessons learned and way forward". In: *Capacity Building in a Changing ICT Environment 2018* (2018), pp. 29–36.

Jose Saldana et al. "Alternative networks: Toward global access to the internet for all". In: *IEEE Communications Magazine* 55.9 (2017), pp. 187–193.

Jorge E Luzuriaga et al. "Evaluando un escenario de pruebas para el IoT entre la emulación y el uso de dispositivos reales". In: *Actas Jornadas Sarteco* (2016), pp. 441–445.

Hope Mauwa, Antoine Bagula, and Marco Zennaro. "Improving Spectrum Sensing as a Method for White Space Identification through Design Principles". In: *Journal of ICT Standardization* 3.3 (2016), pp. 177–200.

Junaid Qadir et al. "Wireless technologies for development [Guest Editorial]". In: *IEEE Communications Magazine* 54.7 (2016), pp. 18–19.

Antoine Bagula, Lorenzo Castelli, and Marco Zennaro. "On the design of smart parking networks in the smart cities: An optimal sensor placement model". In: *Sensors* 15.7 (2015), pp. 15443–15467.

Salomão David, Marco Zennaro, and Américo Muchanga. "The Internet@ rural: why not TV-White spaces in Mozambique?" In: *Privilege, Information, Knowledge and Power: An Endless Dilemma* 7 (2015), p. 28.

Roman Lara et al. "On real-time performance evaluation of volcano-monitoring systems with wireless sensor networks". In: *IEEE Sensors Journal* 15.6 (2015), pp. 3514–3523.

Enrique Canessa et al. "EyApp & AndrEyA—Free Apps for the Automated Recording of Lessons by Students." In: *International Journal of Emerging Technologies in Learning* 9.1 (2014).

Chomora Mikeka et al. "Preliminary performance assessment of TV white spaces technology for broadband communication in Malawi". In: *Procedia Engineering* 78 (2014), pp. 149–154.

- C Mikeka et al. "Malawi television white spaces (TVWS) pilot network performance analysis". In: *Journal of Wireless Networking and Communications* 4.1 (2014), pp. 26–32.
- Sindiso M Nleya et al. "Optimisation of a TV white space broadband market model for rural entrepreneurs". In: *Journal of ICT Standardization* 2.2 (2014), pp. 109–128.
- Clement Onime, Marco Zennaro, and James Uhomoibhi. "A low cost implementation of an existing hands-on laboratory experiment in electronic engineering". In: *International Journal of Engineering Pedagogy (iJEP)* 4.4 (2014), pp. 4–7.
- Dhirendra Sharma, Vikram Kumar, and Marco Zennaro. "Ubiquitous Wireless Sensor Networks for Environmental Monitoring in the Western Himalayan Region of India". In: *International Journal* 4.3 (2014).
- Enrique Canessa et al. "Apps for synchronized photo-audio recordings to support students". In: *Proc. WAVE 2013* (2013).
- Enrique Canessa et al. "Low-cost 3D printing for science, education and sustainable development". In: *Low-Cost 3D Printing* 11 (2013).
- Roman Lara et al. "Towards a new volcano monitoring system using wireless sensor networks". In: *Intelligent Sensors Sensor Networks and Information Processing (ISSNIP)* (2013).
- Million Mafuta et al. "Successful deployment of a wireless sensor network for precision agriculture in Malawi". In: *International Journal of Distributed Sensor Networks* 9.5 (2013), p. 150703.
- Antoine Bagula et al. "Ubiquitous sensor networking for development (usn4d): An application to pollution monitoring". In: *Sensors* 12.1 (2012), pp. 391–414.
- Enrique Canessa, Carlo Fonda, and Marco Zennaro. "On-line certification for all: the Pinvox algorithm". In: *International Journal of Emerging Technologies in Learning (iJET)* 7.3 (2012), pp. 43–45.
- Enrique Canessa and Marco Zennaro. "A mobile science index for development". In: *International Journal of Interactive Mobile Technologies (iJIM)* 6.1 (2012), pp. 4–6.
- Sandro Radicella, Ryszard Strużak, and Marco Zennaro. "Educating on Wireless Solutions for Environmental Monitoring". In: *Journal of Telecommunications and Information Technology* (2012), pp. 78–82.
- Antoine Bagula et al. "Bridging the digital divide in Africa: A technology perspective". In: *Wireless Communication and Information* (2011), pp. 7–28.
- Antoine B Bagula, Isaac Osunmakinde, and Marco Zennaro. "On the relevance of using Bayesian belief networks in wireless sensor networks situation recognition". In: *Sensors* 10.12 (2010), pp. 11001–11020.

Marco Zennaro and Antoine B Bagula. "Design of a flexible and robust gateway to collect sensor data in intermittent power environments". In: *International Journal of Sensor Networks* 8.3-4 (2010), pp. 172–181.

Antoine B Bagula et al. "On the relevance of using openwireless sensor networks in environment monitoring". In: *Sensors* 9.6 (2009), pp. 4845–4868.

Enrique Canessa, Carlo Fonda, and Marco Zennaro. "One year of ICTP diploma courses on-line using the automated EyA recording system". In: *Computers & Education* 53.1 (2009), pp. 183–188.

Enrique Canessa, Marco Zennaro, and Carlo Fonda. "Supporting science in developing countries using open technologies". In: *European journal of physics* 30.3 (2009), p. 651.

Waldir Roque et al. "Tecnologia EyA: uma ferramenta para produção e difusão automatizada de aulas digitais na web". In: *RENOTE-Revista Novas Tecnologias na Educação* 6.1 (2008).

E Canessa, C Fonda, and M Zennaro. "Webcasting of traditional chalkboard lectures: the EyA system". In: *European Journal of Open, Distance and E-learning* 10.2 (2007).

Marco Zennaro et al. "Book Sprint: A New Model for Rapid Book Authoring and Content Development". In: *International Journal of the Book* 4.1 (2007).

Enrique Canessa et al. "A web community to foster science in developing countries: www. ictp. it". In: *International Journal of Web Based Communities* 2.2 (2006), pp. 172–182.

Enrique Canessa et al. "Access to scholarly literature via a free knowledge management enabler: an opportunity for scientists in developing countries". In: *Knowledge Management for Development Journal* 2.3 (2006), pp. 75–85.

Katepalli Sreenivasan et al. "Access to scholarly literature via a free knowledge management enabler: An opportunity for scientists in developing countries". In: (2006).

M Zennaro et al. "Scientific measure of Africa's connectivity". In: *Information Technologies & International Development* 3.1 (2006), pp–55.

Book Chapters

Anjali Askhedkar, Bharat Chaudhari, and Marco Zennaro. "Hardware and software platforms for low-power wide-area networks". In: *LPWAN Technologies for IoT and M2M Applications*. Academic Press, 2020, pp. 397–407.

Anjali Askhedkar et al. "TV white spaces for low-power wide-area networks". In: *LPWAN Technologies for IoT and M2M Applications*. Academic Press, 2020, pp. 167–179.

Bharat S Chaudhari and Marco Zennaro. "Introduction to low-power wide-area networks". In: *LPWAN Technologies for IoT and M2M Applications*. Academic Press, 2020, pp. 1–13.

Bharat Chaudhari and Marco Zennaro. "LoRa Transmission Over Rayleigh Fading Channels in Presence of Interference". In: *Innovations in Electronics and Communication Engineering*. Springer, Singapore, 2020, pp. 185–192.

Antoine B Bagula, Mieso K Denko, and M Zennaro. "Middleware for Mobile and Pervasive Services". In: *Handbook of Mobile Systems Applications and Services*. Vol. 7. CRC Press, 2012, pp. 246–265.

Conference Papers

Steve Chan et al. "The Blindspot of Electromagnetic Interference Affecting Sensitive Medical Devices at Hospitals and Healthcare Facilities". In: *2020 10th Annual Computing and Communication Workshop and Conference (CCWC)*. IEEE. 2020, pp. 0449–0457.

Marco Zennaro et al. "Evaluating the performance of NRENs in deploying IoT in Africa: the case for TTN". In: *2020 IEEE 17th Annual Consumer Communications & Networking Conference (CCNC)*. IEEE. 2020, pp. 1–4.

Pape Abdoulaye Barro, Marco Zennaro, and Jules Degila. "A LoRaWAN Coverage Testbed and a Multi-optional Communication Architecture for Smart City Feasibility in Developing Countries". In: *International Conference on e-Infrastructure and e-Services for Developing Countries*. Springer, Cham. 2019, pp. 73–83.

Pape Abdoulaye Barro, Marco Zennaro, and Ermanno Pietrosemoli. "TLTN—The local things network: on the design of a LoRaWAN gateway with autonomous servers for disconnected communities". In: *2019 Wireless Days (WD)*. IEEE. 2019, pp. 1–4.

Salomão David, Ermanno Pietrosimoli, and Marco Zennaro. "Evaluation of IoT gateways for developing communities: smart Maputo". In: *Proceedings of the Tenth International Conference on Information and Communication Technologies and Development*. 2019, pp. 1–5.

M Marcelli et al. "OpenMODs project: advancing toward the widespread application of low-cost technologies in coastal ocean observing." In: *OCEAN OBS '19, An Ocean of Opportunity, Hawaii Convention Center, Honolulu, HI, USA, 16 September 2019 - 20 September 2019*. 2019.

Ermanno Pietrosemoli, Marco Rainone, and Marco Zennaro. "On Extending the Wireless Communications Range of Weather Stations using LoRaWAN". In: *Proceedings of the 5th EAI International Conference on Smart Objects and Technologies for Social Good*. 2019, pp. 78–83.

Angelica Moreno Cardenas et al. "A LoRa enabled sustainable messaging system for isolated communities". In: *Proceedings of the 4th EAI International Conference on Smart Objects and Technologies for Social Good*. 2018, pp. 118–123.

Salomão David, Américo Muchanga, and Marco Zennaro. "The Co-Regulation of TV-White Spaces: The Southern Africa Development Community Approach". In: *International Conference on Cross-Cultural Design*. Springer, Cham. 2018, pp. 286–297.

Jorge Herrera-Tapia et al. "Evaluating the use of sub-gigahertz wireless technologies to improve message delivery in opportunistic networks". In: *2017 IEEE 14th International Conference on Networking, Sensing and Control (ICNSC)*. IEEE. 2017, pp. 305–310.

Nikola Jovalekic et al. "Smart and very distant objects". In: *Proceedings of the 3rd Workshop on Experiences with the Design and Implementation of Smart Objects*. 2017, pp. 29–34.

Jorge E Luzuriaga et al. "A disruption tolerant architecture based on MQTT for IoT applications". In: *2017 14th IEEE Annual Consumer Communications & Networking Conference (CCNC)*. IEEE. 2017, pp. 71–76.

Antoine Bagula et al. "Cloud based patient prioritization as service in public health care". In: *2016 ITU Kaleidoscope: ICTs for a Sustainable World (ITU WT)*. IEEE. 2016, pp. 1–8.

Salomão David et al. "TV-White Spaces for Education: The Internet for Education in Boane". In: *Conference on M4D Mobile Communication Technology for Development*. 2016, p. 265.

Hope Mauwa et al. "Systematic analysis of geo-location and spectrum sensing as access methods to TV white space". In: *2016 ITU Kaleidoscope: ICTs for a Sustainable World (ITU WT)*. IEEE. 2016, pp. 1–8.

Md Nazmus Sakib Miazi et al. "Enabling the Internet of Things in developing countries: Opportunities and challenges". In: *2016 5th International Conference on Informatics, Electronics and Vision (ICIEV)*. IEEE. 2016, pp. 564–569.

Andres Arcia Moret et al. "Open and regionalised spectrum repositories for emerging countries". In: *Proceedings of the 2016 workshop on Global Access to the Internet for All*. 2016, pp. 13–18.

Ermanno Pietrosemoli et al. "BLOP: Broadband Link to an Offshore Platform in the Venice Lagoon". In: *ExtremeCom 2016*. 2016.

Marco Rainone, Marco Zennaro, and Ermanno Pietrosemoli. "RFTrack: a tool for efficient spectrum usage advocacy in Developing Countries". In: *Proceedings of the Eighth International Conference on Information and Communication Technologies and Development*. 2016, pp. 1–4.

Marco Zennaro, Marco Rainone, and Ermanno Pietrosemoli. "Radio link planning made easy with a telegram bot". In: *International Conference on Smart Objects and Technologies for Social Good*. Springer, Cham. 2016, pp. 295–304.

Roger Baig et al. "Deploying clouds in the Guifi community network". In: *2015 IFIP/IEEE International Symposium on Integrated Network Management (IM)*. IEEE. 2015, pp. 1020–1025.

Roger Baig et al. "The Cloudy distribution in community network clouds in Guifi. net". In: *2015 IFIP/IEEE International Symposium on Integrated Network Management (IM)*. IEEE. 2015, pp. 1161–1162.

Rodrigo J Carbajales et al. "Energy-efficient Internet of Things monitoring with low-capacity devices". In: *2015 IEEE 2nd World Forum on Internet of Things (WF-IoT)*. IEEE. 2015, pp. 305–310.

Hope Mauwa, Antoine Bagula, and Marco Zennaro. "Exploring tv white spaces for use in campus networks". In: *International Conference on e-Infrastructure and e-Services for Developing Countries*. Springer, Cham. 2015, pp. 14–25.

Hope Mauwa, Antoine Bagula, and Marco Zennaro. "WHITENET: A white space network for campus connectivity using spectrum sensing design principles". In: *2015 ITU Kaleidoscope: Trust in the Information Society (K-2015)*. IEEE. 2015, pp. 1–8.

Hope Mauwa et al. "On the impact of propagation models on TV white spaces measurements in Africa". In: *2015 International Conference on Emerging Trends in Networks and Computer Communications (ETNCC)*. IEEE. 2015, pp. 148–154.

Claro Noda et al. "On the scalability of constructive interference in low-power wireless networks". In: *European Conference on Wireless Sensor Networks*. Springer, Cham. 2015, pp. 250–257.

Marco Rainone, Marco Zennaro, and Ermanno Pietrosemoli. "Rftrack: Tvws spectrum measurements using android phones". In: *Proceedings of the 2015 Annual Symposium on Computing for Development*. 2015, pp. 67–68.

Arjuna Sathiseelan et al. "From the chairs". In: *ACM DEV-6 2015-Proceedings of the 2015 Annual Symposium on Computing for Development*. 2015, p. iii.

Timothy X Brown et al. "A survey of TV white space measurements". In: *International Conference on e-Infrastructure and e-Services for Developing Countries*. Springer, Cham. 2014, pp. 164–172.

Román Lara-Cueva et al. "Performance evaluation of a volcano monitoring system using wireless sensor networks". In: *2014 IEEE Latin-America Conference on Communications (LATINCOM)*. IEEE. 2014, pp. 1–6.

Sindiso M Nleya et al. "A non-cooperative TV white space broadband market model for rural entrepreneurs". In: *Proceedings of the 2014 ITU kaleidoscope academic conference: Living in a converged world-Impossible without standards?* IEEE. 2014, pp. 79–85.

C Onime, J Uhomobhi, and M Zennaro. "Demonstration of a low cost implementation of an existing hands-on laboratory experiment in electronic engineering". In: *2014 11th International Conference on Remote Engineering and Virtual Instrumentation (REV)*. IEEE. 2014, pp. 195–197.

Simone Sala et al. "Mitigation of Rain-Induced Ka-Band Attenuation and Enhancement of Communications Resiliency in Sub-Saharan Africa". In: *SIG GlobDev 2014*. 2014.

Marco Zennaro, Ermanno Pietrosemoli, and Arjuna Sathiseelan. "Architecting a low cost television white space network for developing regions". In: *Proceedings of the Fifth ACM Symposium on Computing for Development*. 2014, pp. 113–114.

Andrés Arcia-Moret, Ermanno Pietrosemoli, and Marco Zennaro. "Whisppi: White space monitoring with raspberry pi". In: *Global Information Infrastructure Symposium-GIIS 2013*. IEEE. 2013, pp. 1–6.

Javi Jiménez et al. "Supporting cloud deployment in the Guifi. net community network". In: *Global Information Infrastructure Symposium-GIIS 2013*. IEEE. 2013, pp. 1–3.

Million MafutaA et al. "Successful Deployment of a Wireless Sensor Network for Precision Agriculture in Malawi–WiPAM". In: *3rd IEEE International Conference On Networked Embedded Systems For Every Application*. 2013.

Sindiso M Nleya et al. "A TV white space broadband market model for rural entrepreneurs". In: *Global Information Infrastructure Symposium-GIIS 2013*. IEEE. 2013, pp. 1–6.

Marco Zennaro et al. "An assessment study on white spaces in Malawi using affordable tools". In: *2013 IEEE Global Humanitarian Technology Conference (GHTC)*. IEEE. 2013, pp. 265–269.

Marco Zennaro et al. "TV white spaces, I presume? the quest for TVWS in Malawi and Zambia". In: *Proceedings of the Sixth International Conference on Information and Communications Technologies and Development: Notes-Volume 2*. 2013, pp. 175–178.

R Lowe et al. "A platform to integrate climate information and rural telemedicine in Malawi". In: *EGU General Assembly Conference Abstracts*. Vol. 14. 2012, p. 9503.

Ermanno Pietrosemoli, Marco Zennaro, and Carlo Fonda. "Low cost carrier independent telecommunications infrastructure". In: *2012 Global Information Infrastructure and Networking Symposium (GIIS)*. IEEE. 2012, pp. 1–4.

Marco Zennaro, Antoine Bagula, and Mayamiko Nkoloma. "From training to projects: Wireless sensor networks in Africa". In: *2012 IEEE Global Humanitarian Technology Conference*. IEEE. 2012, pp. 417–422.

Marco Zennaro et al. "On the relevance of using affordable tools for white spaces identification". In: *2012 IEEE 8th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob)*. IEEE. 2012, pp. 606–611.

Mayamiko Nkoloma, Marco Zennaro, and Antoine Bagula. "Sm 2: Solar monitoring system in malawi". In: *Proceedings of ITU Kaleidoscope 2011: The Fully Networked Human?-Innovations for Future Networks and Services (K-2011)*. IEEE. 2011, pp. 1–6.

Hervé Ntareme, Marco Zennaro, and Björn Pehrson. "Delay tolerant network on smartphones: Applications for communication challenged areas". In: *Proceedings of the 3rd Extreme Conference on Communication: The Amazon Expedition*. 2011, pp. 1–6.

Dhirendra Sharma et al. "A Study of Efficiency-Campus Networks in Western Himalayan Universities of India". In: *2011 IEEE Workshops of International Conference on Advanced Information Networking and Applications*. IEEE. 2011, pp. 751–756.

Antoine B Bagula, Ashish Mehta, and Marco Zennaro. "Experimental evaluation of interference mitigation on the 2.4 GHz ISM band using channel hopping". In: *2010 IFIP Wireless Days*. IEEE. 2010, pp. 1–5.

A Bagula et al. "Community sensor networks: An application to pollution maps". In: *Proceedings of the International Wireless Communication and Information Conference, October 2010, Berlin-Germany*. verlag werner hulsbusch, 2010.

David Gascón et al. "Experimental Evaluation of Radio Transceivers for Sensor Networks in Harsh Environments". In: *Proceedings of European Conference on Wireless Sensor Networks (EWSN 2010), 17-19th February 2010, Coimbra, Portugal*. 2010.

Marco Zennaro et al. "Long distance wireless sensor networks: simulation vs reality". In: *Proceedings of the 4th ACM Workshop on Networked Systems for Developing Regions*. 2010, pp. 1–2.

Marco Zennaro et al. "Planning and deploying long distance wireless sensor networks: The integration of simulation and experimentation". In: *International Conference on Ad-Hoc Networks and Wireless*. Springer, Berlin, Heidelberg. 2010, pp. 191–204.

Marco Zennaro et al. "On the design of a water quality wireless sensor network (wqwsn): An application to water quality monitoring in malawi". In: *2009 international conference on parallel processing workshops*. IEEE. 2009, pp. 330–336.

Marco Zennaro et al. "On the relevance of Open Wireless sensors for NGN". In: *2009 ITU-T Kaleidoscope: Innovations for Digital Inclusions*. IEEE. 2009, pp. 1–8.

Rob Flickenger et al. "Very long distance wi-fi networks". In: *Proceedings of the second ACM SIGCOMM workshop on Networked systems for developing regions*. 2008, pp. 1–6.

Marco Zennaro, Hervé Ntareme, and Antoine Bagula. "Experimental evaluation of temporal and energy characteristics of an outdoor sensor network". In: *Proceedings of the International Conference on Mobile Technology, Applications, and Systems*. 2008, pp. 1–5.

Marco Zennaro, Hervé Ntareme, and Antoine Bagula. "On the design of a flexible gateway for Wireless Sensor Networks". In: *First International Workshop on Wireless Broadband Access for Communities and Rural Developing Regions 2008, Uppsala, Sweden*. 2008.

Marco Zennaro, Bjorn Pehrson, and Antoine Bagula. "Wireless Sensor Networks: a great opportunity for researchers in Developing Countries". In: *Proceedings of WCITD2008 Conference, Pretoria, South Africa*. Vol. 67. 2008.

Marco Zennaro et al. "On a long wireless link for rural telemedicine in Malawi". In: *6th International Conference on Open Access Lilongwe, Malawi*. 2008.

Enrique Canessa, Carlo Fonda, and Marco Zennaro. "EyA system: Automated audio-video-slide recordings". In: *ICL-Interactive Computer Aided Learning, Villach, Austria*. 2007.

Victor Kyalo et al. "Scalable Models for Establishment of Sustainable Broadband Services in Rural Areas of developing regions". In: *Workshop at the 4th Web4Dev Conference, Nairobi Kenya*. 2007.

Marco Zennaro, O Fonda, and Enrique Canessa. "Eya: enhance your conference audience using apple technologies". In: *Poster presented at WWDC07-Apple Developers Conference, USA*. 2007.

Katepalli Sreenivasan et al. "A Web community to foster science in developing countries: www. ictp. it". In: *Proceedings of the IADIS International Conference on Web Based Communities, Algarve, Portugal*. 2005, pp. 23–25.