

## SCCER-SoE Publications Hydropower

Title	Authors	Title of journal	Year of publication	DOI
Analytical hill chart towards the maximisation of energy recovery on water utility networks with counter rotating micro-turbine	L. Andolfatto; J. Delgado; E. Vagnoni; Cé. Münch-Aligné & F. Avellan	Proceedings of the 36th IAHR World Congress, The Hague, The Netherlands, 2015	2015	
A mixed Standard/Custom Design Strategy to Minimize Cost and Maximize Efficiency for Picohydro Power Potential Harvesting	L. Andolfatto; C. Euzenat; E. Vagnoni; Cé. Münch-Aligné & F. Avellan	Proceedings of the 5th International Youth Conference on Energy, IYCE 2015, Pisa, 2015	2015	
Application of laser doppler velocimetry to the development of a counter rotating micro-turbine	E. Vagnoni; L. Andolfatto; J. Delgado; Cé. Münch-Aligné & F. Avellan	Proceedings of the 36th IAHR World Congress, The Hague, The Netherlands, 2015	2015	
Experimental method for the evaluation of the dynamic transfer matrix using pressure transducers	Keita Yamamoto, Andres Müller, Takuya Ashida, Koichi Yonezawa, François Avellan & Yoshinobu Tsujimoto	Journal of Hydraulic Research	2015	10.1080/00221686.2015.1050076
Flow Simulation of Jet Deviation by Rotating Pelton Buckets Using Finite Volume Particle Method	C. Vessaz, E. Jahanbakhsh and F. Avellan	Journal of Fluids Engineering	2015	doi:10.1115/1.4029839
Flexibilisierung der Wasserkraft in der Schweiz für zukünftige Aufgaben im internationalen Strommarkt	Schleiss, A., Oberrauch, F	Wasser Energie Luft, Vol. 106, Heft 3, 2014, pp. 175-178	2014	
Reactivation of Klingnau reservoir sidearm: Numerical simulation of sediment release downstream	Amini A., Heller P., De Cesare G., Schleiss A.J., Kräuchi N. & Rötheli P.	Proc. River Flow 2014, A.J. Schleiss, G. De Cesare, M. Franca, M. Pfister, Eds. EPFL Lausanne, Paper 257, 2069-2074, CRC Press/Balkema, Leiden NL	2014	10.1201/b17133-304
Flow restoration in Alpine streams affected by hydropower operations—a case study for a compensation basin	Bieri M., Müller M., Schweizer S. & Schleiss A.J.	Proc. River Flow 2014, Special Session on Swiss Competences in River Engineering and Restoration, A.J. Schleiss, J. Speerli, R. Pfammatter, Eds. EPFL Lausanne, 181-190, CRC Press/Balkema, Leiden NL	2014	10.1201/b17134-23
Sediment Evacuation from Reservoirs through Intakes by Jet-Induced Flow	Jenzer Althaus, J. M. I., De Cesare, G, Schleiss, A. J	Journal of Hydraulic Engineering, 141(2), 2015,	2015	10.1061
Störfall com 30. März 2013 bei der Staumauer Punt dal Gall	De Cesare, G., Altenkirch, N., Schleiss, A.J., Roth, M., Molinari, P., Michel, M	Wasser Energie Luft, Vol. 107, Heft 1, 2015, pp. 1-8	2015	
Impact du retrait glaciaire et adaptation du potentiel hydroélectrique dans les Alpes suisses	Terrier, S., Bieri, M., Jordan, F., Schleiss, A. J	La Houille Blanche (70), 1 (2015), pp. 93-101	2015	10.1051/lhb/2015012
Parametric Study of Steel-Lined pressure Shafts in Anisotropic Rock	Pachoud, Alexandre J., Schleiss, Anton J	Proc. of the ITA-AITES World Tunnel Congress 2015 (ISBN 978-953-55728-5-5), May 22-28, 2015, Dubrovnik, Croatia	2015	
Extreme flood assessment in Swiss alpine environment	Zeimetz, Fränz, Receanu, Ramona, Schleiss, Anton J	Proceedings of the 25th Int. Congress on Large Dams, ICOLD, Stavanger, Norway, 15-19 June 2015, Q97R24, pp. 58-59 (Abstract book)	2015	
Laboratory research: bed load guidance into sediment bypass tunnel inlet	De Cesare G., Manso P., Daneshvari M., and Schleiss A.	Proc. 1st Intl. Workshop on Sediment Bypass Tunnels, VAW-Mitteilungen 232 (R.M. Boes, ed.), Laboratory of Hydraulics, Hydrology and Glaciology, ETH Zürich, 2015, Switzerland, pp. 169-179	2015	
Untapped hydropower in Alpine catchments: hidden potential and infrastructure way forward	Santos, A.C, Schaeffli B, Manso P. , Schleiss A. Rinaldo A.	EGU, Vienna	2015	
Stream temperature prediction in ungauged basins: review of recent approaches and description of a new physically-based analytical model,	Gallice, A. and Schaeffli, B. and Lehning, M. and Parlange, M. P. and Huwald, H	1., Hydrol. Earth Syst. Sci. Disc., 12, 4081-4155, 2015	2015	
Scale-dependent effects of solar radiation patterns on the snow-dominated hydrologic response	F. Comola, B. Schaeffli, P. Da Ronco, G. Botter and M. Bavay et al.	Geophysical Research Letters, 2015	2015	
Projecting hydropower production under future climates: a guide for decision-makers and modelers to interpret and design climate change impact assessments	B. Schaeffli	Wiley Interdisciplinary Reviews: Water, 2015,	2015	
Risks and Reliability in a Fully Renewable Switzerland	Stuart Bartlett, Bert Kruyt, Annelen Kahl, Michael Lehning	Proceedings of the European Safety and Reliability Conference	2015	
Field research: Invert material resistance and sediment transport measurements	Michelle Hagmann, Ismail Albayrak & Robert M. Boes	Proc. of First International Workshop on Sediment Bypass tunnels, VAW Mitteilung 232	2015	

Downstream morphological impact of a sediment bypass tunnel - preliminary results and forthcoming actions	Matteo Facchini, Annuziato Siviglia & Robert M. Boes	Proc. of First International Workshop on Sediment Bypass tunnels, VAW Mitteilung 232	2015	
Saltation-abrasion model for hydraulic structures	Christian Auel, Ismail Albayrak, T. Sumi & Robert M. Boes	Proc. of First International Workshop on Sediment Bypass tunnels, VAW Mitteilung 232	2015	
Current sedimentation research at VAW	Ismail Albayrak & Robert M. Boes	Proc. of First International Workshop on Sediment Bypass tunnels, VAW Mitteilung 232	2015	
Sedimentation countermeasures in Switzerland	Robert M. Boes & Michelle Hagmann	Proc. of First International Workshop on Sediment Bypass tunnels, VAW Mitteilung 232	2015	
Field measurements of suspended sediment using several methods	David Felix, Ismail Albayrak, Robert M. Boes	Proc. Of 36th IAHR World congress	2015	
Bed-load particle motion in supercritical open channel flow.	Christian Auel, Ismail Albayrak, Robert M. Boes	Proc. Of 36th IAHR World congress	2015	
Breaching of small embankment dams: tool for cost-effective determination of peak breach outflow.	Boes, R.M., Vonwiller, L., Vetsch, D.F.	Proc. Of 36th IAHR World congress	2015	
Air transport processes in tailrace channels.	Lucas, J., Lais, A., Hager, W.H. & Boes, R.M.	Jl. of Hydr. Engineering: 141(7), 05015002	2015	
Vortex-induced air entrainment rate at intakes.	Möller G., Detert, M. & Boes, R.M. (2015)	Jl. of Hydr. Engineering: 10.1061/(ASCE)HY.1943-7900.0001036 , 04015026	2015	
Stepped Chute of Trängslet Dam: Physical Model Study.	Lutz, N., Lucas, J., Lais, A., Boes, R.M.	Jl. of Applied Water Eng. and Res.	2015	<a href="http://dx.doi.org/10.1080/23249676.2015.1051143">http://dx.doi.org/10.1080/23249676.2015.1051143</a>
Optimizing the sustainability of sediment bypass tunnels to counter reservoir sedimentation	Auel, C., Hagmann, M., Albayrak, I., Boes, R.M.	Proc. 25 <sup>th</sup> ICOLD Congress, Stavanger, Norway, Q.99-R.31: 431-452	2015	
Upgrading spillway capacity at large, non-overtoppable embankment dams	Boes, R.M., Lutz, N., Lais, A.	Proc. 25th ICOLD Congress, Stavanger, Norway, Q.97-R.23: 332-348	2015	
Suspended Sediment and Bed Load Transport Monitoring Techniques	Albayrak I., Felix D., Hagmann M, Boes R.M.	38. Dresdner Wasserbaukolloquium, Dresdner Wasserbauliche Mitteilungen Heft 53, ISBN 978-3-86780-420-2: 405-414	2015	
Methode zur Beurteilung des maximalen Breschenabflusses bei progressivem Bruch homogener Erdschüttdämme an kleinen Stauhaltungen	Vonwiller, L., Vetsch, D., Peter, S., Boes R.M.	Wasser, Energie, Luft 107(1): 37-43	2015	
Massnahmen zur Gewährleistung eines schonenden Fischabstiegs an grösserem mitteleuropäischen Flusskraftwerken	C.R. Kriewitz, I. Albayrak, D. Flügel, T. Bös, A. Peter, R.M. Boes	Wasser Energie Luft	2015	
Wasserkraftnutzung im Wasserschloss Schweiz: Herausforderungen aus ökologischer Sicht	C. Weber, M. Schmid	Forum für Wissen	2014	
Fischwanderung in genutzten Gewässern - Herausforderungen und Lösungen	C. Weber, R. Bösiger, A. Peter, S. Vollenweider	WasserWirtschaft	2015	
Fischwanderung in genutzten Gewässern - Herausforderungen und Lösungen	C. Weber, R. Bösiger, A. Peter, S. Vollenweider	Wasser Energie Luft	2015	
Design and control of a new hydraulic test rig for small hydro turbines	V. Hasmatuchi, S. Gabathuler, F. Botero, C. Münch	Hydropower & Dams	2015	vol 22, n°4
Hydraulic performance of a new isokinetic turbine for rivers and artificial channels	Hasmatuchi V., Alligné S., Kueny J.-L., Münch C	E-proceedings of the 36th IAHR World Congress, The Hague, The Netherlands, June 28 - July 3, 2015	2015	
New hydraulic test rig for small power turbomachines	Hasmatuchi V., Botero F., Gabathuler S., Münch C.	E-proceedings of the 36th IAHR World Congress, The Hague, The Netherlands, June 28 - July 3, 2015	2015	
Design & performance of a hydraulic micro-turbine with counter-rotating runners	Biner D., Hasmatuchi V., F. Avellan, Münch-Alligné C.	5th International Youth Conference on Energy 2015, Pisa, Italia, May 27-30, 2015	2015	
Substantial glacier mass loss in the Tien Shan over the past 50 years	Daniel Farinotti (WSL) et al.	Nature Geoscience	2015	10.1038/ngeo2513
Trends in the predictive performance of raw ensemble weather forecasts	Hemri, S., M. Scheuerer, F. Pappenberger, K. Bogner, and T. Haiden	Geophys. Res. Lett.	2014	10.1002/2014GL062472