Structural Engineering

Catalog No.	Subject	Researchers names
515	Use of Precast Components for Sheltered Spaces - Considerations and Preliminary Experiments	D. Yankelevsky, A. Hanaor, S. Schwarz
522	Aspects of corrosion in reinforced concrete structures and its influence on structural safety (stage B)	Dimitri Val
528	Identification of Structural Damages using Non-destructive Test	Yiska Goldfeld
533	Prediction of the contact pressure acting on a buried structure - Continuation of the experimental research.	Mark Talesnick, Avraham Dancygier, Yuri Karinski
537	Behavior of shallow underground supported cavities under dynamic loads	Mark Antis, Yuri Karinski, David Yankelevsky
538	Masonry Walls Strengthened For One-Way Out-of-Plane Bending with Composite Materials – Modes of Failure	E. Hamed, O. Rabinovitch
542	Seismic Upgrade of Existing Multistory RC Frame Buildings by means of Anchored Steel Components Stage I – Comparative experimental investigation of beam-column assemblages	S. Schwarz, A. Hanaor, E. Leibovitch
554	Behavior of Shallow Underground Supported Cavities Under Dynamic Loads – Stage B	M. Antis D.Z. Yankelevsky, Y.S.Karinski
556	Nano-and micro-devices for monitoring transportation structures and the development of smart and interactive concretes	Konstantin Kovler, Oded Rabinovitch, Yiska Goldfeld, Raphael Linker, Assaf Klar
557	Assessment of the seismic stability of existing residential frame buildings with masonry infill walls	V.I. Lishak, V.I. Yagust, D.Z. Yankelevsky
561	Behavior of Reinforced Concrete Shear Walls – Phase I	David Yankelevsky Amir Abutbul
562	Thermal Effects in Reinforced Concrete Beams Strengthened with Externally Bonded Composite Materials – Response to Service Thermal Loads	Oded Rabinovitch
564	Use of Precast Components for Sheltered Spaces Stage II	David Yankelevsky, Stephan. Schwarz, Ariel Hanaor, Yuri Karinski

567	Horizontal Load Resistance RC Frames with Masonry Infill Panels Stage I	Stephan. Schwarz, Ariel Hanaor, David Yankelevsky,
572	Response of the Soil Surface to Dynamic Load Action at the Rock Base Phase I	Vladimir Feldgun, Yuri Karinski, David Yankelevsky
573	Meshless Methods to Analyze Underground Cavities in Rock Phase I	Mark. Antes, Yuri Karinski, David.Yankelevsky
574	Updating the Design Provisions for Reinforced Concrete Structures in the Israeli Code 413 (Provisions for Earthquake Resistance of Structures) towards Transfer to the Israeli Code 466 (The Concrete Code)	Avraham Pisanty
577	Preparation of Realistic Earthquake Damage Scenarios and Data for Decision Making Stage I – Part 1	D. Yankelevsky, S. Schwarz, Y. Ofir, E. Leibovitch
579	Enhanced Protection of an Underground Structure Subjected to a Nearby Explosion by Circumferential Obstacles.	Vladimir Feldgun, Yuri Karinski, David Yankelevsky
580	Response of a Buried Tunnel to a Nearby Underground Explosion. Stage B.	Vladimir Feldgun, Yuri Karinski, David Yankelevsky.
582	Damage Prediction of Housing Structure Elements Due to a Confined Explosion	David.Yankelevsky, Vladimir Feldgun, Yuri Karinski
583	Modeling failure propagation in concrete structures under high-velocity impact	Konstantin. Volokh.
584	Development of Concrete with High Ductility for Improved Dynamic Behavior	Mert Yardimci Avi Dancygier. Amnon Katz David Yankelevsky
585	Performance based optimal seismic retrofitting of structures by means of passive control	Robert Levy, Oren Lavan,
587	Seismic Upgrade of Existing Multistory RC Frame Skeleton Buildings with External Steel Elements Stage II - Experimental investigation of upgraded beam-column assemblages	Stephan. Schwarz, Ariel Hanaor
588	Behavior of Shallow Underground Supported Cavities Under Dynamic Loads – Stage C	David Yankelevsky, Yuri Karinski, Mark Antis

590	Response of the Soil Surface to Dynamic Load Action at the Rock Base Phase II	Vladimir Feldgun, Yuri. Karinski, Dina Tsemakh, David Yankelevsky
591	Static Behavior of Structural Elements made of High Strength Steel Fiber Reinforced Concrete– Stage 2: Anchorage at supports and direct tension	Amnon Katz, Avi Dancygier
592	Behavior of Shallow Underground Supported Cavities Under Dynamic Loads – Stage D	David Yankelevsky, Yuri Karinski, Mark Antis
593	Damage Identification of 3D Frame Structures Based on Global Dynamic Testing	Yiska Goldfeld
598	Resistance of mortar bed joint in block masonry wall under the action of a horizontal force – stage I	Vladimir. Yagust, David Yankelevsky
599	Meshless Methods to Analyze Underground Cavities in Rock Phase II	Mark Antes, Yuri Karinski, David Yankelevsky
602	Response of the Soil Layer's Surface to Dynamic Load Action at the Rock Base	Vladimir Feldgun, Yuri. Karinski, Dina Tsemakh, David Yankelevsky
603	Modeling Failure Propagation in Reinforced Concrete Structures under High-velocity Impact	Konstantin Volokh
604	Seismic Behavior of Lined Tunnel	Mark Antes, Yuri Karinski, David Yankelevsky
612	Behavior Prediction of Concrete under Dynamic Load by Discrete Element Numerical Simulation – Stage 1	Avi Dancygier Zvi Savir Yuri Karinski Mark Antes
614	Resistance of Ordinary Civilian Buildings Against War Threats-Stage I	Stephan Schwarz David Yankelevsky
609	Approximate method for efficient assessment of horizontal load resistance of multistory buildings Stage I	David Yankelevsky Stephan Schwarz Y. Ofir
620	Seismic retrofitting of wall structures using viscous dampers	Oren Lavan
622	Horizontal Load Resistance RC Frames with Masonry Infill Panels Stage II	Stephan Schwarz Vladimir Yagust David Yankelevsky
623	Flexural Static Behavior of Normal Strength Reinforced Concrete Beams	Avraham Dancygier Erez Berkover

624	A study on the behavior and the failure of the bond between reinforcement and concrete under monotonic and cyclic loading	Mahmood Jabareen. Lina Issawi
625	Damage Prediction of Structural Elements Due to a Confined Explosion Stage B.	David Z.Yankelevsky Vladimir R. Feldgun Yuri S. Karinski Dina Tzenakh, Idan Edri
634	Improved Impact Resistance of Dual-Layered Concrete Barriers	David Benamou, Avraham Dancygier. Amnon Katz David Z.Yankelevsky
635	Seismic Behavior of Lined Tunnel	D.Z. Yankelevsky Y.S.Karinski M. Antis
640	Principles of design of structures to resist blast loads	D. Yankelevsky S. Schwarz
641	Response of the Soil Layer's Surface to Dynamic Load Action at the Rock Base Phase II	David Z.Yankelevsky Vladimir R. Feldgun Yuri S. Karinski Dina Tsemakh
642	The Effect of Explosion within an Infrastructure Tunnel on the Soil Surface and on Nearby Tunnels	Vladimir R. Feldgun Yuri S. Karinski David Z.Yankelevsky Dina Tsemakh
643	Seismic Behavior of Lined Tunnel Stage III	Yuri S.Karinski David Z. Yankelevsky Mark Antes
644	Multi-modal Seismic Direct Displacement Based Design approach of Building Structures	Oren Lavan Philip J. Wilkinson
645	Strengthening of Bidirectional Concrete Slabs with Composite Materials: Analysis, Special aspects, and Survey of Standards	Dvir Elmalich Oded Rabinovitch
647	Behavior of Concrete elements with minimal reinforcement and steel fibers – stage 1: Theoretical model	A.N.Dancygier Y.S.Karinski
648	Flexural static behavior of concrete beams with low reinforcement ratios and steel fibers	Assoc. Prof. Avraham Dancygier
656	Seismic Behavior of Lined Tunnel and its Effect on the Free Surface	Dr. Vladimir R. Feldgun Dr. Yuri S. Karinski Prof. David Z.Yankelevsky
657	Examination of the effect of masonry infill walls on reduction of the danger of progressive collapse of multistory buildings incorporating reinforced concrete frame skeleton Stage I	Stephan Schwarz Alex. Brodsky Vladimir. Yagust David Z. Yankelevsky

658	Tsunami Waves Loading on Engineering Structures	Yuri S. Karinski Dina Tzemah Vladimir R. Feldgun David Z.Yankelevsky
659	Seismic retrofitting of wall structures using viscous dampers mounted on a few stories	Oren Lavan Julia Tokarev

Geotechnical Engineering

Catalog No.	Subject	Researchers names
576	Liquefaction, Stiffness and Damping of Israeli Sand during earthquake	Mark Talesnick, Sam Frydman, Arilon Mehr, Michael Tsesarsky
596	Rational Design of Reinforced Soil Walls using Kinematic Constraints	Assaf Klar,. Tal Sas
610	Soil-Structure Interaction due to Tunneling	Assaf Klar Itai Elkayam
615	Advanced monitoring of bridges using fiber optics	Assaf Klar Yiska Goldfeld
626	Disaggregation Seismic Maps for Israel	Assaf Klar
649	Coupled Analysis of Seismic Site Response and Liquefaction Potential in the Zvulun Valley	Sam Frydman
653	Earthquake Induced Damage Reduction to The Built Infrastructure-Economic and Engineering Aspects –Stage I	S. Schwarz Y. Rosenfeld D. Yankelevsky, E. Leibovich Z. Hefetz M. Zilka

Building Materials, Performance & Technology

Catalog No.	Subject	Researchers names
508	Utilization of Aggregate Fines in Concrete as an Active Filler by Using Active Surface Agent	Hadassa Baum, Amnon Katz
509	Problem of Radon Gas in Dwellings, Stage 2	Konstantin Kovler, Andrey Perevalov
510	Manual for Radon Protection of New Buildings	Konstantin Kovler, Aviel Levit, Andrey Perevalov
511	The Use of Recycled Inert Materials for Construction	Hadassa Baum, Amnon Katz
525	Improvement of the sealing and adhesion between fresh and hardened concrete using polymer materials	Moshe Puterman
529	Influence of Fines on concrete Mixes	Hadassa Buam, Amnon Katz
540	Cracking Sensitivity of Concretes	Konstantin Kovler, Arnon Bentur
541	Re-evaluation of the requirements in standards for minimum cement content for durability performance	R. Wassreman, A. Bentur, A.Katz
546	Properties of the concrete cover And its durability	Irina (Rina) Wasserman, Arnon Bentur
547	Development of an experimental facility for performance testing of external walls – air and water permeability testing of walls with dry joints	Rachel Becker
548	Development of an experimental facility for performance testing of external walls – air and water permeability testing of walls with dry joints	Rachel Becker with the participation of Ariel Hanaor, Moshe Puterman, Stephan Schwarz
552	Investigation of composite cements	Amnon Katz, Arnon Bentur, Konstantin Kovler, Pavel Larianovsky
553	High strength concrete-Stage I: Part 2-properties of concrete with local aggregates	Katz Amnon, Dancygier Avraham, Bentur Arnon, Leviathan Itai
555	KAR-HAM A simplified calculation model for the overall estimation of energy consumption in acclimatized buildings	Monica Paciuk, Samuel Hassid
558	Energy-related implications of shadow casting by high rise buildings: quantification of its effect on the energy balance of adjacent buildings – Stage I	Monica Paciuk

559	Thermal Actions on Bridges, Stage I – Concrete Slab and Concrete Beam Bridges	Rachel Becker, Dina Shamir
565	The technological factors affecting the bond strength of the hard external cladding in view of fracture mechanics Phase I: The bond strength of cladding made of the ceramic tiles adhered to the concrete wall	Irina Wasserman, Yagust Vladimir
566	Integrative Model to Materialize the Existing Potential of Natural Stone in Israel for Environmentally Friendly Construction	S. Zingerman, Konstantin Kovler, Yehiel Rosenfeld
569	Properties of Mortar for Rendering and Plastering Affected by Fines Content in Sand	Hadassa Baum
570	Alternative Subgrades for Natural Sand for floors, Including Acoustic Testing	Hadassa Baum, Juval Mantel
571	Optimization of the design of flowing concretes for maximizing durability and long term performance	Irina Wasserman, Pavel Larianovsky,.. Amnon Katz, Arnon Bentur
578	Program for determination of coefficients of the Standard 5098	Konstantin Kovler, Vitaliy Priven Yair Shamai
581	Effect of acidic rain and UV irradiation on weathering of reinforced concrete	Rina Wasserman Arnon Bentur
586	Development of non-destructive test to monitor concrete curing	Rina Wasserman . Arnon Bentur
589	Enhancement of the concrete performance and durability by clayey mineral nano-additives	Irina (Rina) Wasserman, Arnon Bentur
594	Development of non-destructive test to monitor concrete curing	Rina Wasserman Arnon Bentur
595	Thermal Actions on Bridges – Stage 2 Box Bridges and Tunnel Beam Bridges	Rachel Becker Dina Shamir
600	Criteria for Determining the Efficiency of Curing of Concrete Surfaces with Curing Compounds in Hot-Dry Climate	Rina Wasserman Arnon Bentur
601	Cracking Sensitivity of Concretes Stage II	Konstantin Kovler, Arnon Bentur, Semion Zhutovsky
605	Quality Control Self Testing Engineering, Architectural and Performance Aspects Stage I	Rachel. Becker, Stephan. Schwarz, Sam. Frydman, M. Ben-Bassat

606	Feasibility study for optimal integration of phase change materials, PCM, in building elements for achieving major energy savings	Rachel. Becker, Evgeniy Beagon
608	Fabric reinforced cementitious composites for retrofit and strengthening of structures	Alva Peled, Michael Tsesarsky, Amnon Katz
611	High strength concrete – Stage II, Part A: shrinkage and creep of high strength concrete Part B: proposal for additions to SI466 to include high strength concrete, including commentary	Amnon Katz Avraham Dancygier. Arnon Bentur Itai Leviathan
613	Improving the recycability of waste concrete with polymeric emulsion	Amnon Katz Pavel Larianovsky
627	Radon exhalation from concrete containing coal fly ash	Konstantin Kovler, Rachel Becker, Gustavo Haquin
628	The soluble silicate concentration in concretes with and without pouzzolans admixtures, and its influence on steel passivation	Amit Kenny Amnon Katz
631	Gamma radiation in dwellings in Israel	Konstantin Kovler Zakhar Prilutsky
632	Effect of the efficiency of curing on weathering of reinforced concrete exposed to acidic rain and UV irradiation	Rina Wasserman Arnon Bentur
637	The Survey of Natural Radioactivity in Concrete Stage I	Konstantin Kovler Nathan Lavi Shmuel Levinson Zeev Alfassi
638	Concrete with improved ductility confaining recycled tire products for implementation in safety road barriers	Konstantin Kovler . Rina Wasserman. Amit Kenny
639	Technological Aspects affecting the adhesion strength of rigid ceramics tiles to concrete and Ytong masonry background-phase II	Rina Wasserman Yagust Vladimir
654	Production of Environmentally Friendly Building materials from Phosphogypsum – Technological Feasibility Study: Stage I	K. Kovler B. Dashevsky
655	Technological infrastructure for reducing the clinker content in concretes: Fly ash with CEMII cements	Amit Kenny Arnon Bentur

660	Failure of cementitious materials after their application in construction sites in wet conditions	Semion Zhutovsky Konstantin Kovler

Construction Management and Economics

Catalog No.	Subject	Researchers names
512	Development of Systematic Process and Practical Model for Equipment Selection in Construction Projects	Aviad Shapira, Marat Goldenberg
513	Development of Indices for Safety Risk Evaluation of Construction Sites with Tower Cranes Part I: Detection and Analysis of Safety Hazards	Aviad Shapira, Beny Lyachin
509	Technologies for the management and control of materials, labor and equipment for construction projects	Ronei Navon, Eitan Goldschmidt
526	Integrating pre-cast elements in residential construction Technological solutions and economic easibility	Yehiel Rosenfeld
534	Opportunities for integration of advanced means for partial industrialization of construction as an alternative to labor-intensive methods	Yehiel Rosenfeld
536	The labor input factor in various construction technologies	Yehiel Rosenfeld
544	Improving the Competitiveness of Industrialized Components in Construction using Building Information Modeling	Rafael Sacks, Israel Kaner, Alberto Esquenazi
549	Development of an Innovative Earthmoving Equipment Control Model in Road Construction Projects	Ronie Navon, Simon Khoury & Yerach Doytsher
550	Identifying and Analyzing Root Causes for Defects in Residential Construction	Yehiel Rosenfeld, Chanan Ben-Oz
560	A Dynamic lean quantitative method for planning activities to enhance safety in construction	Rafael Sacks Yehiel Rosenfeld Hadassa Baum Ophir Rozenfeld

568	The Potential for Construction Productivity Improvement through Industrialization according to Lean Principles	Rafael Sacks, Aviad Shapira, Irina Brodetskaia, Rebecca Partouche
575	Development of Quantitative Measures for Safety-Risk Evaluation of Construction Sites with Tower Cranes Part III: Development of Risk Scales, Integration, and Model Implementation	Aviad Shapira,. Meir Simcha, Marat Goldenberg,
607	Characterization of Building Defects by their Root Causes: Identification of their Causes, Timing of Creation and Exposure, Development of their Cost, and Remedies for Minimization	Yehiel Rosenfeld Chanan Ben-Oz
617	The Impact of the KanBIM™ System on the Productivity, Quality and Safety of Finishing Works	Rafael Sacks Ronen Barak Ury Gurevich Biniamin Belaciano
619	Analysis of Financial Ratios for Construction Companies	Ronie Navon . Itai Paz-Chen .
621	Three Dimensional (3D) Information for Safety Management of Tower Cranes	Sagi Filin Aviad Shapira Amit Wicnudel
633	Construction Safety Training using Immersive Virtual Reality	Rafael Sacks Ronen Barak, Amotz Perlman Biniamin Belaciano,
646	Safe Construction by Design: Virtual Assessment of Construction Hazards in Design	Rafael Sacks Eng. Gabi Raviv Dana Swissa Aviad Shapira
651	Factors Affecting the Selection of Forming Systems and Other Major Equipment for Multistory Building Construction	Aviad Shapira, Efraim Yona
661	Assessment of Earthquake Damage to Buildings Using a Building Information Model and Laser Scanning	Rafael Sacks Reem Zeibak-Shini Ling Ma Sagi Filin