



# 工程建设与设计

国家机械工业局工程建设中心 中国机械工业勘察设计协会 中国中元国际工程有限公司 CN 11-3914/TU 2018 年第12月上 总第397期



州宝贤华瀚建筑工程设计有限公司  
建筑师 丁宁  
万方数据



**动态资讯**

- 07 “住建部公布新一批资质核准名单：30家企业取得特级资质”等信息12则

**访谈**

- 10 以人为本，打造新时代建筑设计精品——访广州宝贤华瀚建筑工程设计有限公司总建筑师丁宁

**信息化**

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13 把握时代机遇，共赢变革未来

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19 基于网络地理信息服务的水务综合管理应用  
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40 抗震支吊架地震作用计算方法的适用性研究（赖光书，丁幼亮，朱浩樑，梁启慧）  
44 既有办公建筑机电系统节能诊断及改造效益分析（乔振勇，邓文，颜峰，黄渝兰，张红，倪吉）  
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- 201 雷公山滑坡体防滑加固施工技术(陆灿根)
- 205 大跨度变曲率竖曲线钢箱梁顶推施工控制技术研究(雷新斌)
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- 216 采用路桥施工技术处理软土地基方法分析(李林)
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- 221 平顶直墙管幕洞桩法施工技术研究(刘强)
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- 226 双护盾TBM施工中围岩分类模型参数的相关性分析(崔怀树)
- 229 房建工程施工过程中基坑支护施工技术(张松)
- 231 渠底改造机械一体化施工机械优化及施工技术研究(牛尚峰, 郑贵亮, 章再兴)
- 235 彩色混凝土透水路面铺装技术及其发展概述(胡新宏)
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- 255 隧道施工对临近桥梁的影响分析(赵旭)
- 257 阶梯式水景施工技术难点与防控措施分析(王欣国)
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- 267 孔道压浆饱满度检测影响因素分析(李建祥, 文元勇)
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- 278 现阶段岩土勘测技术在施工作业中存在的问题(许峥)
- 280 谈如何做好公路工程建设项目档案管理工作探究(梁红垒)
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- 287 市政工程的质量管理研究(陈光)
- 289 建筑工程监理对工程安全监督管理的探究与实践(谢凡)
- 292 EPC项目成本管理模式研究(舒建平)
- 294 如何有效加强水利施工管理(丁长春)
- 297 对建筑施工企业资质管理的思考与探索(孔委)
- 299 PPP模式下高速公路建设项目的融资风险分析与对策研究(张华, 杨芬)
- 302 路桥工程现场施工管理的难点及应对措施(张占霄)
- 304 建筑混凝土裂缝出现的原因及预防管理分析(付盛忠)



**INFORMATION**

- 07 "Ministry of Housing and Urban-Rural Development announced a new batch of qualification approval list: 30 enterprises have obtained super qualification" Etc. 12

**INTERVIEW**

- 10 Elaborate Construction Design for the People  
— Interview with Mr. Ning Ding, Chief Engineer of Guangzhou BXHH Architectural & Engineering Co., Ltd.

**INFORMATIZATION**

- 12 Forum on scientific development of urban construction in China 2018 was held  
13 Seize the opportunities of The Times to achieve win-win change in the future

**FORUM**

- 15 Application of Three-Dimensional Finite Element Numerical Simulation in Stability Evaluation of Mined-out Area  
19 Application of Integrated Water Management Based on Network Geographic Information Service  
21 Discussion on Concrete Structure Design of High-rise Building  
23 The Establishment of 3d Model Based on Digital Photogrammetry and the Exploration of Key Elements  
25 Design and Management of Prefabricated Building under EPC Mode

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- 27 Practice of Building Structure Design Optimization Method in Housing Structure Design (WANG Shun)  
30 The Design Technology and System Development of BIM-Based Building Anti-Seismic Support Hanger (CHEN Jia-yao, ZHU Hao-liang, DING You-liang, LIANG Qi-hui)  
33 Analysis of the Development Trend of Modern Urban Landscape Design (HE Yan, LIAO Yu-sha)  
35 Application Advantage of Non-Bonded Prestress Technology in Circular Cistern (LU Hong-bo, YANG Chen-guang, ZHANG Lei)  
38 A Brief Discussion on Precision Engineering Surveying and Its Related Application (ZHANG Zhi-cheng)  
40 Applicability Research of Seismic Calculation Method for Anti-Seismic Support Hangers (LAI Guang-shu, DING You-liang, ZHU Hao-liang, LIANG Qi-hui)  
44 Analysis of Diagnosis of Energy Saving and Benefit of Electromechanical System of an Existing Office Building (QIAO Zhen-yong, DENG Wen, YAN Feng, HUANG Yu-lan, ZHANG Hong, NI Ji)  
47 Consideration of Spatial Planning at County Level (ZHAO Qian-ni)  
50 Analysis of Seismic Design Points of Reinforced Concrete Buildings (XUE Ji-ming)

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55 Study on Metallogenic Regularity of Polymetallic Deposits in Contact Zone of Dulong Mining Area of Wenshan (LUO Ai-guo)  
58 Deformation Control Technology of Foundation Pit in Complex Surrounding Environment (ZHANG Yan-ping)  
60 Self-Balanced Test Study on Bearing Capacity of Manual Digging Rock-Socketed Piles (WANG Gui-bin, CHEN Xue, WANG Fa-xu, WU Xing-shou, XU Fu-jian)  
63 The Treatment Measures of Silt Soft Foundation in Open Caisson Construction Using the Method of Sand Gravel Replacement and Filling Combining with Sand Pile Reinforcement (WEI Chun-lai, LEI Shi-song)  
65 Deformation Monitoring and Numerical Analysis of Foundation Pit of a Subway Station in Zhengzhou (HU Juan, XIAO Zhao-ran)  
68 Key Points of the Analysis of Engineering Geological Survey and Hydrogeological Evaluation (HE Shao-sheng)  
70 Points Analysis of Stable Flow Porous Pumping Test —Taking the Hole S1CW1 of Changzhou Rail Transit Line 2 as an Example (WU Jing-shu)  
74 Pre-Dewatering Test of Foundation Pit and Its Influence on Subway Tunnel (LIU Wen-jie, HE Xu-feng)  
76 Study on the Stability Analysis and Dynamic Design of Highway Excavated Subgrade Slope (QI Yi-bin)

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84 HVAC Design for Wuxing Building of Qingyang (SHAN Min)  
87 The Application and Analysis of the 110kV Pre-Installed Substation in the New Energy Power Grid (YANG Li-wei, WANG Li-dan, ZHI Pei)

**Municipal Traffic Water Resources Engineering Design**

- 90 Research and Implementation of Rapid Modeling of Urban Underground Pipelines in 3DEXPERIENCE Platform (QI Ming, ZHU Xing)  
93 Research on the Necessity of Setting up a Crossing River Pipeline Standby Channel Based on Failure Probability Analysis (ZHAN Sheng-wen, REN Wen-ming, ZHANG Jin-yuan)  
97 Study on the Route Direction of Zambia Eastern Railway Crossing the Nature Reserve (DING Jian-guo)  
99 System Dynamic Performance Impact Analysis of Existing Railway Base on Adding Second Line of Broad-Gauge Railway (WU Tao)  
102 Design of an Outdoor Landscape Steel Arch Bridge (TAO Jin-fu, CHEN Ke)  
105 Study on the Feasibility Design of Rail Transit (WU Yan)  
107 Effective Strategy for Constructing Transportation System of Transportation Integration (JIANG Yao-wu)  
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112 Analysis of the Factors Needing to Consider in the Railway Line Design and Its Development Discussion (KE Rui-yong)  
114 Discussion on the Design Principle and Method of Three-Dimensional Visualization of Railway Lines (LIU Chun-hua)  
117 The Application of Two Enlarged Bottom AM Pedestal Pile in Airport Construction Above the Railway (XIA Yong)  
120 Reflection on the Practice of Urban Road Reconstruction Design (YUAN Jie)  
123 Construction and Analysis of Urban Water Supply and Drainage Pipeline System Based on the Concept of Sponge City (CUI Qian-hua)  
125 A Design Framework for Practical Seismic Performance of Highway Bridges Based on the Probability (YAN Yan, ZHANG Yong-qiang)  
128 Design and Construction Technology of Bolting and Shotcreting Support for Slope (LI Xiang-fu)  
130 Research on Improving Traffic Congestion Based on the Refined Design Concept of Road Traffic (TAO Xue-qian)  
133 Study on the Key Problems in the Course of Road and Bridge Reinforcement (ZHU De-qing)

- 135 Study on Treatment Method of Poor Foundation in Water Conservancy and Hydropower Engineering Construction (GAO Feng)
- 138 Study on the Application Value of BIM Concept in Municipal Engineering Design (ZHANG Jun-shen, YANG Zhen-wen, SUN Yi-yin)
- 140 The Investigation Method for Karst Development Area of Ji'nan Tunnel Project (SU Zhi-hong)
- 144 The Research Framework Construction of the Key Points of Durability Design of Segment Prefabricated Assembled Bridges (YAN Jun)
- 146 The Application of Coordinate Inverse Algorithm in the Construction of Ballasting-Track Surveying (WANG Zhen)
- 149 Study on Track Retest Technology of High Speed Railway (HAO Guang-ming)
- 151 Study on Characteristics and Control Technology of Railway Subgrade Water Damage (ZHAO Long-tao)
- 154 Study on the Application of Fine Adjustment Technology for High Speed Railway (LI Hua-ri)
- 156 The Problems and Solutions of Urban River Regulation Planning (PENG Hu-yue, LUO Hai-yang)
- 159 Analysis on the Design Points of Outdoor Municipal Water Supply Pipeline (WANG Xi)
- 161 The Application of Cast-in-Place Foamed Lightweight Soil in Reconstruction and Extension Project Design (BU Yong, CAO Jian-jian)
- 165 Analysis of the Factors Influencing the Design of High-Grade Highway Traffic Safety Facilities (LI Ye)

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- 170 Flue Gas Desulfurization and denitrification Technology of Air pollutants in Thermal Power Plant (HAN Bing)

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- 175 Quality Control and Inspection Analysis of Aerial Digital Surveying and Mapping Products (WANG Jian-feng)

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- 180 Study on Quality Control of the Construction of Steel Structure (XING Jian-feng)
- 183 Key Analysis of Construction Scheme of Shallow Buried Soft Surrounding Rock Tunnel Based on Deformation Stability (DUN Jian-guo, ZHANG Meng-wei)
- 186 Plugging Grouting Technology for Upper Reservoir of Qingyuan Pumped Storage Power Station (DAI Fu)
- 189 Study on Key Technology and Application of Prefabricated Construction of Pier Cap of Viaduct Urban Rail Transit (TIAN Wen-jiang)
- 194 Design and Construction of Concrete Pavement in Storage Yard Under British Standard System (LI Ning, REN Liang-min)
- 197 Study on the Rule of Freeze-Thaw Damage of High-Strength Concrete Under Coupling Effect of Different Factors (ZHANG Wei, ZHANG Jian-ye)
- 201 Construction Technology of Anti-Slip Reinforcement of Sliding Slope of Leigong Mountain (LU Can-gen)
- 205 Research on Technologies control of Incremental Launching Construction of Long-Span Steel-Box Girder on Vertical Curve with Changing Curvature (LEI Xin-bin)
- 209 Study on Safety Technology of the Excavation of Underground Engineering in Complex Stratum (LUO Xiao-gang)
- 211 Analysis of the Influence of Climate Characteristics on Building Construction in Beihai City (HUO Zhao-xin, FAN Jing)
- 214 Discussion on Construction Technology of Self-Propelled Pressure Anchor in Excavation and Protection of Slope (LIAO Zhi-cheng)
- 216 Analysis of Soft Soil Foundation Treatment by Road Bridge Construction Technology (LI Lin)
- 219 Prevention Measures Exploration of Karst Ground Collapse Induced by Pile Foundation Construction (ZHOU Wen-long)

- 221 Research on Construction Technology of Pipe Curtain Hole Pile Method With Flat Top and Straight Wall (LIU Qiang)
- 224 Discussion on Technical Treatment of Common Problems in Concrete Construction of Building Construction Engineering (CAI Bao-long)
- 226 Correlation Analysis of Parameters of Surrounding Rock Classification Model in TBM Construction with Double Shield (CUI Huai-shu)
- 229 Construction Technology of Foundation Pit Support in Building Construction Process (ZHANG Song)
- 231 Research on Mechanic Optimization and Construction Technology of Machinery Integrated Construction of Canal Bottom Reconstruction (NIU Shang-feng, ZHENG Gui-liang, ZHANG Zai-Xing)
- 235 The Paving Technology and Development of Color Concrete Permeable Pavement (HU Xin-hong)
- 237 Technology Points of Earthwork Filling Compaction in Embankment Engineering (ZHU Yu-zhao)
- 240 Construction Method of Dam Filling of Concrete Face Rockfill Dam of Reservoir (YAO Yun-hui)
- 242 The Application of Combined preloading of Prestress and Concrete Block in the Construction of Off Block (HE Jun, MENG Shi-cong)
- 245 Study on the Reinforcement Technology of Pile Foundation in Bridge Construction (ZHANG Hua, PENG Shi-jiang)
- 247 The Application of Bracket Grading and Amplification Technology in Y-Shaped Pier of Continuous Rigid Structure Bridge (CHENG Li)
- 250 The Core Idea of the Application of Soil Anchor Technology in the Construction of Building Foundation Engineering (XU Zheng-feng, LI Han)
- 252 The Application of Pipe Shed Comprehensive Technology in the Construction of Karst Cave Development Area of Railway Tunnel (ZHANG Hai-yong)
- 255 Influence of Tunnel Construction on Adjacent Bridges (ZHAO Xu)
- 257 Analysis on Construction Technical Difficulties and Prevention and Control Measures of Terraced Waterscape (WANG Xin-guo)
- 261 Study on the Application of the Construction Technology of Pre-Simple-Supported and Post-Structure Continuous Bridge in Highway Engineering Construction (FENG Yi-hu)
- 264 Construction Technology of Bored Pile in Road and Bridge Construction Project (LIAN Xiao-hong)
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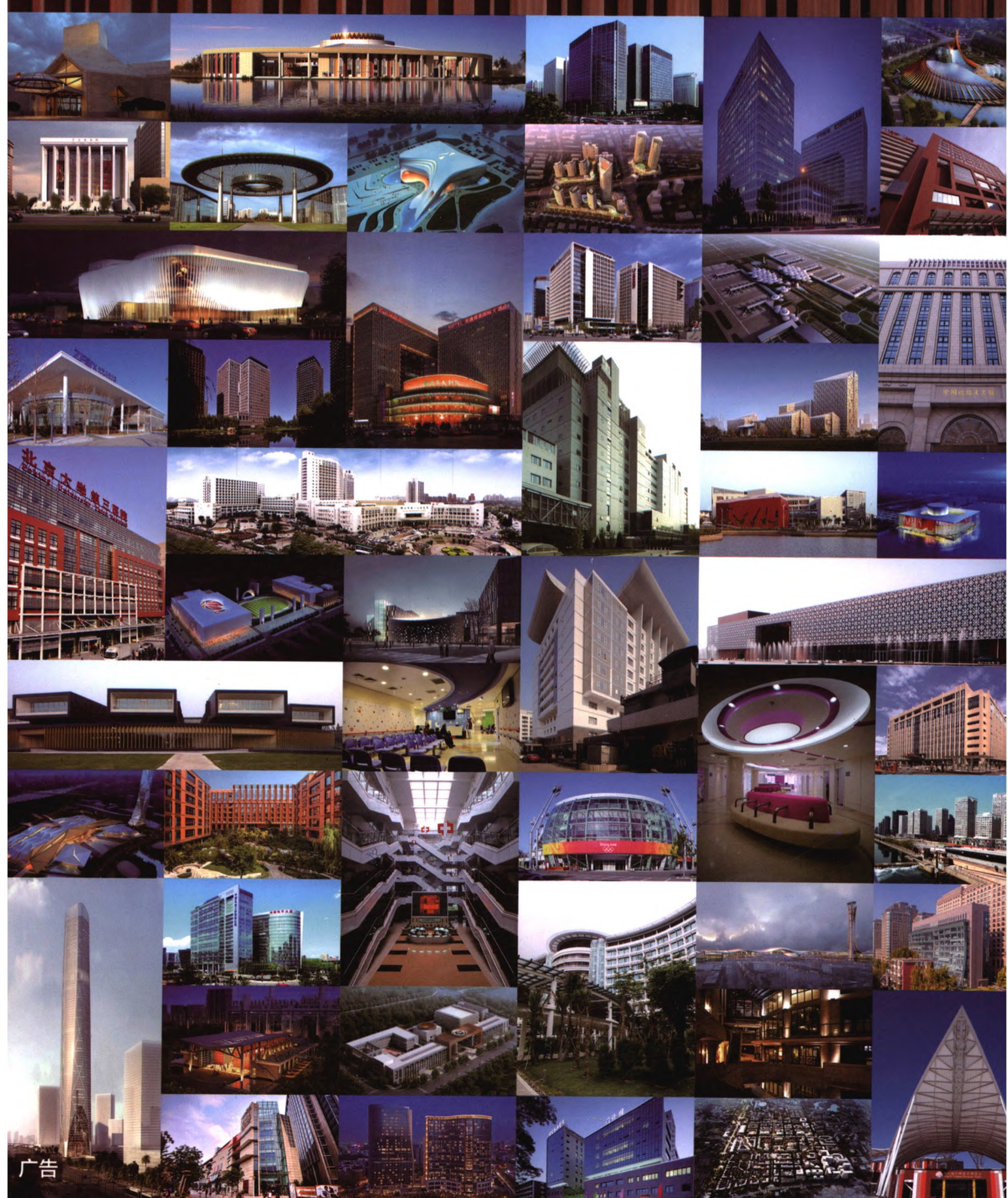
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