

力学学报 1984 年分类目录

流 体 力 学

- 亚临界平面 Poiseuille 流的三维非线性稳定性问题——(1)共振三波概念
的推广.....周 恒 16,1(1)
- 大气中对流的分岔和突变模型.....刘式达 刘式适 16,1(10)
- 具有 $Le_f \approx 1$ 的反应面理论及其在氧化-升华耦合过程研究中的应用 ...
.....钟家康 16,1(27)
- 颤振主动抑制的状态空间法.....丁爱祥 16,2(113)
- 关于一类层结切变流的分类和非线性解.....
.....刘式达 陈家宜 刘式适 王淑芳 16,2(121)
- 气体动力学中 Грив-Рябинич 方法在水力学中的应用与推广 高道扬 16,2(133)
- 蜂蜡球锥的驻点烧蚀研究.....周正瑾 16,2(192)
- 亚临界平面 Poiseuille 流的三维非线性稳定性问题——(2)共振三波的非
线性演化问题.....周 恒 王亦工 16,3(205)
- 在激波作用下三维物体表面压力分布的计算.....陈耀松 邹光远 16,3(214)
- 单重和双重孔隙介质二相二维渗流的一个新的数值模拟方法.....
.....刘明新 陈钟祥 16,3(225)
- 跨声速圆球阻力和流场.....郑之初 汪锡琦 韩 忠 16,3(234)
- 沿纵向弯曲壁面湍流边界层的大涡模拟.....苏铭德 R. Friedrich 16,4(321)
- 粘弹性流体在滑动轴承中的效应.....陈文芳 蔡扶时 16,4(333)
- 数值求解不可压粘性流体定常运动的格林函数方法.....吴江航 16,5(425)
- 含灰气体绕半无限平板流动的层流边界层.....赵国英 16,5(434)
- Stokes 流动中连续奇点线分布法的分段抛物近似 吴望一 王少华 16,5(443)
- 细长三角翼前缘和后缘涡层的卷起及其相互作用研究.....
.....尹协远 夏 南 邓国华 16,5(454)
- 带有颗粒的圆射流冲击平板的计算.....刘大有 16,5(463)
- 二元亚跨声速喷管流动.....浦 群 林同骥 16,6(535)
- Olbroyd 速率型本构方程显式化的微分算符形式
.....陈一泓 许元泽 陈文芳 16,6(546)
- 关于平面跨音叶栅进口边界条件的数值处理.....张耀科 沈孟育 16,6(553)
- 平面强爆震波对运动薄物体的绕射.....庄峰青 16,6(562)
- 扩压通道内可允许的最大压力梯度的确定准则.....吴国钊 16,6(625)

固 体 力 学

- 关于用里兹法求位移等量的收敛性条件.....胡海昌 16,1(36)

• i •

我国管板“设计规定”与 TEMA 标准的对比及其试验验证	黄克智 薛明德 16,1(43)
孔为 SH 波绕射问题的渐近解法	盖秉政 16,1(96)
充液圆柱壳的自振特性	朱大同 16,2(141)
玻璃纤维增强聚酯复合材料断裂性能的实验研究	刘荣进 徐德福 李 兰 邵玉琴 赵建华 16,2(200)
轴对称薄壳弹塑性大变形有限元分析	陆明万 16,3(241)
弹性力学的几个新概念及其一种应用	陈绍江 16,3(259)
弹性波对填充介质腔的绕射	盖秉政 16,3(275)
多层半无限弹性体在圆形荷载作用下的解析解	郭文复 16,3(282)
纤维增强层合板在单双面压缩下屈曲的优化设计	吕明身 16,3(316)
Reissner 型板裂纹尖端应力应变场及应力强度因子计算	柳春图 李英治 16,4(351)
氢原子在裂纹端点区的漂流与减内聚力模型	陆毅中 李栋才 16,4(363)
在混合硬化材料中 I 型裂纹定常扩展时的尖端场	张晓堤 张润甫 黄克智 16,4(370)
正交复合材料层板断裂模型的研究	薛元德 岑金根 16,4(382)
关于非线性弹性理论的变分原理	梁浩云 16,4(389)
用反演变换坐标系求解一些二维弹性力学问题	王 芃山 16,4(417)
一种非局部弹塑性连续体模型与裂纹尖端附近的应力分析	虞吉林 郑哲敏 16,5(485)
平面应力弹塑性复合型断裂研究	徐纪林 薛以年 韩金虎 16,5(495)
理想刚塑性 Timoshenko 梁动力响应的分析解	金泉林 16,5(504)
用形变理论分析结构塑性屈曲时的一类广义变分原理	李国琛 16,5(512)
带有椭圆孔的裂纹系问题	汤任基 王银邦 16,6(570)
可膨胀塑性本构方程及其在轴对称试棒韧性断裂分析中的应用	李国琛 16,6(580)
变厚度圆底扁薄球壳的非线性稳定问题	叶志明 16,6(634)

一 般 力

四元数矩阵的乘法及其可易性	肖尚彬 16,2(159)
极限环的稳定性和对应矢量场的散度	薛问西 16,2(167)
关于 Kane 方程	陈 滨 16,3(311)
分析力学中的 Nielsen 算子和 Euler 算子	梅凤翔 16,6(596)
带环形阻尼器自旋卫星的章动阻尼	洪嘉振 16,6(605)

物 理 力 学

Couchman-Reynolds 方程的检验与体积模量及关联系数的计算	严祖同 杜宜瑾 陈立溱 16,3(299)
高压气体状态方程的计算机模拟	陈致英 孙祉伟 16,4(422)

岩 土 力 学

埋地长输管道热胀内力近似分析.....崔孝秉 16,1(51)

电磁流体与等离子体力学

弱引力场中活塞运动的球对称解.....唐泽眉 16,5(476)

爆 炸 力 学

爆破抛体加速运动的渗流模型计算.....杨人光 庞维泰 16,1(62)

材料强度在爆炸焊接界面波形成过程中的作用.....

.....张登霞 李国豪 周之洪 邵丙璜 16,1(73)

受压固、气两相介质一维膨胀运动.....谈庆明 丁雁生 郑哲敏 16,4(340)

计 算 力 学

Galerkin 有限元近似的非线性计算稳定性问题.....季仲贞 16,1(19)

时间推进有限面积流线迭代法及其在平面叶栅跨音速绕流中的应用.....

.....沈孟育 陈细倮 16,2(107)

变厚度薄板、壳广义杂交元.....陈万吉 16,3(249)

样条厚薄板通用矩形单元.....袁 驹 16,4(401)

有限条元法的基本方程与级数收敛性能.....赵祖武 16,6(589)

有限元近似解方法的理论与应用.....谷传纲 16,6(629)

生 物 力 学

静脉椭圆管的血液流动分析.....林擢仙 冯元生 16,5(521)

实验技术与实验方法

空气正激波后电子浓度的测量.....崔季平 何宇中 范秉诚 16,1(81)

微波条纹干涉仪用于激波管中电离现象的研究.....竺乃宜 李学芬 16,1(85)

激光诱导荧光法显示超音速化学激光器的全流场.....

.....孙思远 桑凤亭 周必迁 谢行滨 庄 琦 张存浩 16,1(92)

利用激光衍射谱的变化测量金属表面的塑性变形并确定其弹塑性区交界

.....续伯钦 伍小平 16,2(175)

激波加热空气红外辐射的测量.....罗 军 李红德 李思文 16,2(185)

散斑光弹性干涉法.....戴福隆 钟国成 16,3(305)

改善再入通讯的化学减轻实验研究.....朱宗厚 王柏一 林 烈 16,4(408)

酚醛玻璃钢层裂准则的实验研究.....沈乐天 赵士达 白以龙 赵双录 16,6(615)

其 他

利用有限差分法求解扩散混合化学反应二维平行流动...陈海韬 周兴华 16,2(151)

关于在炮风洞中辨识静、动稳定导数的数学模型	江权伟 周淑英	16,2(197)
大功率 CO ₂ 激光器输出窗口的热应力问题	解伯民 俞 刚	16,3(290)

讨 论

对“分区混合有限元法计算应力强度因子”的讨论	谢定一	16,1(104)
奇异元的选取对计算精度的影响——兼答谢定一同志	匡文起	16,1(166)
关于非线性计算稳定性问题	刘儒勋	16,5(528)

ACTA MECHANICA SINICA, 1984

ANALYTIC SUBJECT INDEX

Mechanics of Fluids

- Three-dimensional nonlinear stability problems for the plane Poiseuille flow in the subcritical range——(1) extension of the idea of resonant triad Zhou Heng 16,1(9)
- A model of bifurcation and catastrophe of the convection in atmosphere Liu Shida, Liu Shikuo 16,1(18)
- Theory of the reaction surface with $Le_f \approx 1$ and its application to investigation of oxidation-sublimation coupling process Zhong Jiakang 16,1(35)
- The state-space method of active flutter suppression Ding Aixiang 16,2(120)
- The classification of a family of stratified shear flow and some relevant nonlinear solution Liu Shida, Chen Jiayi, Liu Shikuo, Wang Shufang 16,2(132)
- Application and extension of the Гриб-Рябинин method in aerodynamics to hydrodynamics Gao Daoyang 16,2(140)
- Stagnation point ablation study of spherical-nosed wax cones Zhou Zhengjin 16,2(196)
- Three-dimensional nonlinear stability problems for the plane Poiseuille flow in the subcritical range——(2) The evolution of the resonant triad Zhou Heng, Wang Yigong 16,3(213)
- The pressure calculation of a shock wave diffraction around an arbitrary 3-dimensional body Chen Yaosong, Zou Guangyuan 16,3(224)
- A new numerical method of simulating two-dimensional two-phase flow through a medium with single- or double-porosity Liu Mingxin, Chen Zhongxiang 16,3(233)
- Sphere drags and flow fields at transonic speeds Zheng Zhichu, Wang Xiqi, Han Zhong 16,3(240)
- Large eddy simulation of a turbulent wall-bounded shear layer with longitudinal curvature Su Mingde, R. Friedrich 16,4(332)
- Viscoelastic effects on slider bearing lubrication C. F. Chan Man Fong, Cai Fushi 16,4(339)
- A Green's function method for the numerical solution of steady-state incompressible viscous fluid flow Wu Jianghang 16,5(433)
- Compressible gas-solid-particle boundary layer over a semi-infinite flat plate Zhao Guoying 16,5(442)
- The parabolic approximation of the line continuous distribution method of singularities in Stokes flow Wu Wangyi, Wang Shaohua 16,5(453)
- Investigation of rolling-up and interaction of leading-edge and trailing-edge vortex sheets on a slender delta wing Yin Xieyuan, Xia Nan, Deng Guohua 16,5(462)
- Calculation of the circular jet with particles impacting upon a plate

• v •

- Liu Dayou 16,5(475)
- Subsonic and transonic flow field in two-dimensional laval nozzles
 Pu Qun, Lin Tongji 16,6(545)
- On the explicit form of the differential operator for the oldroyd rate type
 constitutive equation
 Chen Yihong, Xu Yuanze, C. F. Chan Man Fong 16,6(552)
- On the numerical treatment of the entry boundary conditions in transonic
 flow through plane cascade Zhang Yaoke, Shen Mengyu 16,6(561)
- Diffraction of strong detonation waves by a moving three-dimensional thin body
 Zhuang Fengqing 16,6(569)
- A Criterion for determining acceptable steepest local pressure gradients in an
 inlet Wu Guochuan 16,6(628)

Mechanics of Solids

- On the convergence of displacement and other quantities in Ritz method.....
 Hu Haichang 16,1(42)
- A comparison of Chinese pressure vessel design regulations on tubesheets of
 heat exchangers with American standards of TEMA and its verification by
 experiments Hwang Kehchih, Xue Mingde 16,1(50)
- The asymptotic method for the problems of the diffraction of SH wave from
 a non-circular cylinder..... Gai Biengzheng 16,1(103)
- On the free vibration of a circular cylindrical shell filled with liquid
 Zhu Datong 16,2(150)
- Experimental study of fracture for glass/polyester
 Liu Rongjin, Xu Defu, Li Lan Shao Yuqin, Zhao Jianhua 16,2(204)
- A finite element analysis for the axisymmetric shells with large elasto-plastic
 deformation Lu Mingwan 16,3(248)
- New concepts of elasticity theory and an application Chen Shaoting 16,3(274)
- The diffraction of elastic waves by a cavity filled with medium
 Gai Bingzheng 16,3(281)
- A theoretical analysis for layered and halfinfinite elastic body under circular
 loading Guo Wenfu 16,3(289)
- The optimization against buckling of the Fiber-reinforced laminate plates under
 the unidirectional and bidirectional compression Lu Mingshen 16,3(320)
- Stress strain fields at crack tip and stress intensity factors in Reissner's plate
 Liu Chuntu, Li Yingzhi 16,4(362)
- The drift flow of hydrogen atoms around a crack tip and the decohesion
 model Lu Yizhong, Li Dongcai 16,4(369)
- Near-tip fields for mode-I crack during steady growth in materials with mixed
 hardening Zhang Xiaoti, Zhang Runfu, Hwang Kehchih 16,4(381)
- A study on fracture model of cross-ply composite laminates
 Xue Yuande, Chen Chinkung 16,4(388)
- On the variational principles in nonlinear theory of elasticity... Liang Haoyun 16,4(400)
- The solution of some two-dimensional problems of elasticity by using inversion
 Wang Xieshan 16,4(421)
- A model of nonlocal elastic-plastic continuum applied to the stress distribution

- near a crack tip Yu Jilin, Zheng Zhemin 16,5(494)
- An elastic-plastic mixed mode fracture investigation for plane stress
..... Xu Jilin, Xue Yinian, Han Jinhu 16,5(503)
- An Analytical solution of dynamic response for the rigid perfectly plastic
Timoshenko beam Jin Qianlin 16,5(511)
- A general variational theorem for the structural plastic buckling analysis using
the deformation theory Li Guochen 16,5(520)
- Problem of crack system with an elliptical hole.....
..... Tang Renji, Wang Yinbang 16,6(579)
- Dilatational plastic constitutive equations and application in the ductile fracture
analysis of axisymmetric specimens Li Guochen 16,6(588)
- The nonlinear stability problem of thin spherical cap with variable thickness
..... Ye Zhiming 16,6(638)

General Mechanics

- Multiplication of quaternion matrixes and its commutativity ... Xiao Shangbin 16,2(166)
- Stability of limit cycles and the divergence of its vector field.....Xue Wenxi 16,2(174)
- On Kane's equation Chen Bin 16,3(315)
- Nielsen's operator and Euler's operator in analytical mechanics.....
..... Mei Fengxiang 16,6(604)
- Nutation damping of spinning satellite with annular damper ... Hong Jiazhen 16,6(614)

Physical Mechanics

- The test of Couchman-Reynolds equation and the calculation of bulk modul-
uses and of correlation coefficients
..... Yan Zutong, Do Yijing, Chen Lirong 16,3(304)
- Computer simulation for the equation of state of high pressure gases
..... Chen Zhiying, Sun Zhiwei 16,4(424)

Rock and Soil Mechanics

- Approximate analysis of the thermal internal forces in a long underground
pipe line Cui Xiaobing 16,1(61)

Mechanics of Electromagnetic Fluids and Plasmas

- The spheric-symmetrical solution of a piston moving in weak field of gra-
vitation..... Tang Zemei 16,5(484)

Mechanics of Explosion

- Calculation on acceleration process of projectil considering the effect of
permeation Yang Renguang, Pang Weitai 16,1(72)
- Effect of material strength on forming process of explosive welding interface
wave..... Zhang Dengxia, Li Guohao, Zhou Zhihong, Shao Binghuang 16,1(80)
- One-Dimensional expansion of a pressurized solidgas two phase medium
..... Tan Qingming, Ding Yansheng, Zheng Zhemin 16,4(350)

Computational Mechanics

- On the nonlinear computational stability of the Galerkin finite element ap-

- proximationJi Zhongzhen 16,1(26)
- A time marching finite area streamline iteration method and its application to
transonic flow around plane cascade Shen Mengyu, Chen Xidi 16,2(112)
- The generalized hybrid element of thin plate and shell with varying thickness
..... Chen Wanji 16,3(258)
- Spline rectangular thick/thin plate elements Yuan Si 16,4(407)
- Basic equations of finite strip method and character of convergence of series
..... Zhao Zuwu 16,6(595)
- Theory and application of finite element approximate solution method (FEASM)
.....Gu Chuangang 16,6(633)

Biomechanics

- An analysis of blood flow in the elliptical venal tube
.....Lin Xiexian, Feng Yuansheng 16,5(527)

Experimental Techniques and Methods

- The measurement of electron density behind normal shock waves in air
.....Cui Jiping, He Yuzhong, Fan Bingcheng 16,1(84)
- The investigation of ionization phenomena of shock tube using microwave
interferometer Zhu Naiyi, Li Xuefen 16,1(91)
- Lif visualization of supersonic chemical Laser flowfields.....Sun Siyuan,
Sang Fengting, Zhou Bigian, Xie Xingbin, Zhuang Qi, Zhang Cunhao 16,1(95)
- Measuring plastic deformation on a metal surface and determining the elasto-
plastic boundary from the change of laser-produced diffraction patterns...
.....Xu Boqin, Wu Xiaoping 16,2(184)
- Recent Measurement of the near IR radiation from shock-heated air
.....Luo Jun, Li Hongde, Li Siwen 16,2(191)
- A speckle-photoelastic interference methodDai Fulong, Zhong Guocheng 16,3(310)
- Experimental study of chemical alleviation for improving reentry communica-
tion Chu Zonghou, Wang Boyi, Lin Lie 16,4(416)
- An experimental study of spallation criterion in phenolicresin based woven
roving glass fibre reinforced composite material
.....Shen Letian, Zhao Shida, Bai Yilong, Zhao, Shuanglu 16,6(624)

Miscellaneous

- A finite differential method for two-dimensional parallel flow with diffusion
mixing and chemical reactionChen Haitao, Zhou Xuehua 16,2(158)
- On the mathematical model for identification of static and dynamic stability
derivative in gun tunnel..... Jiang Quanwei, Zhou Shuying 16,2(199)
- On the thermal stress and fracture of the window of a CO₂ high power laser
..... Xie Bomin, Yu Gong 16,3(298)

Discussion

- Discussion on "sub-region mixed finite element method for the calculation of
stress intensity factor" Xie Dingyi 16,1(105)
- Influence of singular element characteristic on the precision of computing—
answer to comrade xie dingyi's commentKuang Wenqi 16,1(106)
- On the nonlinear computational stability Liu Ruxun 16,5(534)